Annex B City of Colfax

B.1 Introduction

This Annex details the hazard mitigation planning elements specific to the City of Colfax, a previously participating jurisdiction to the 2016 Placer County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document, but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the City. This Annex provides additional information specific to Colfax, with a focus on providing additional details on the risk assessment and mitigation strategy for this community.

B.2 Planning Process

As described above, Colfax followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Placer County Hazard Mitigation Planning Committee (HMPC), the City formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table B-1. Additional details on Plan participation and City representatives are included in Appendix A.

Table B-1 City of Colfax – Planning Team

Name	Position/Title	How Participated
Wes Heathcock	City Manager	Provided past occurrence info, provided input on mitigation actions
Emmanuel Ursu	Planning Director	Attended meetings, reviewed the annex, updated the mitigation actions

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the City integrated the previously approved 2016 Plan into existing planning mechanisms and programs. Specifically, the City incorporated into or implemented the 2016 LHMP through other plans and programs shown in Table B-2.

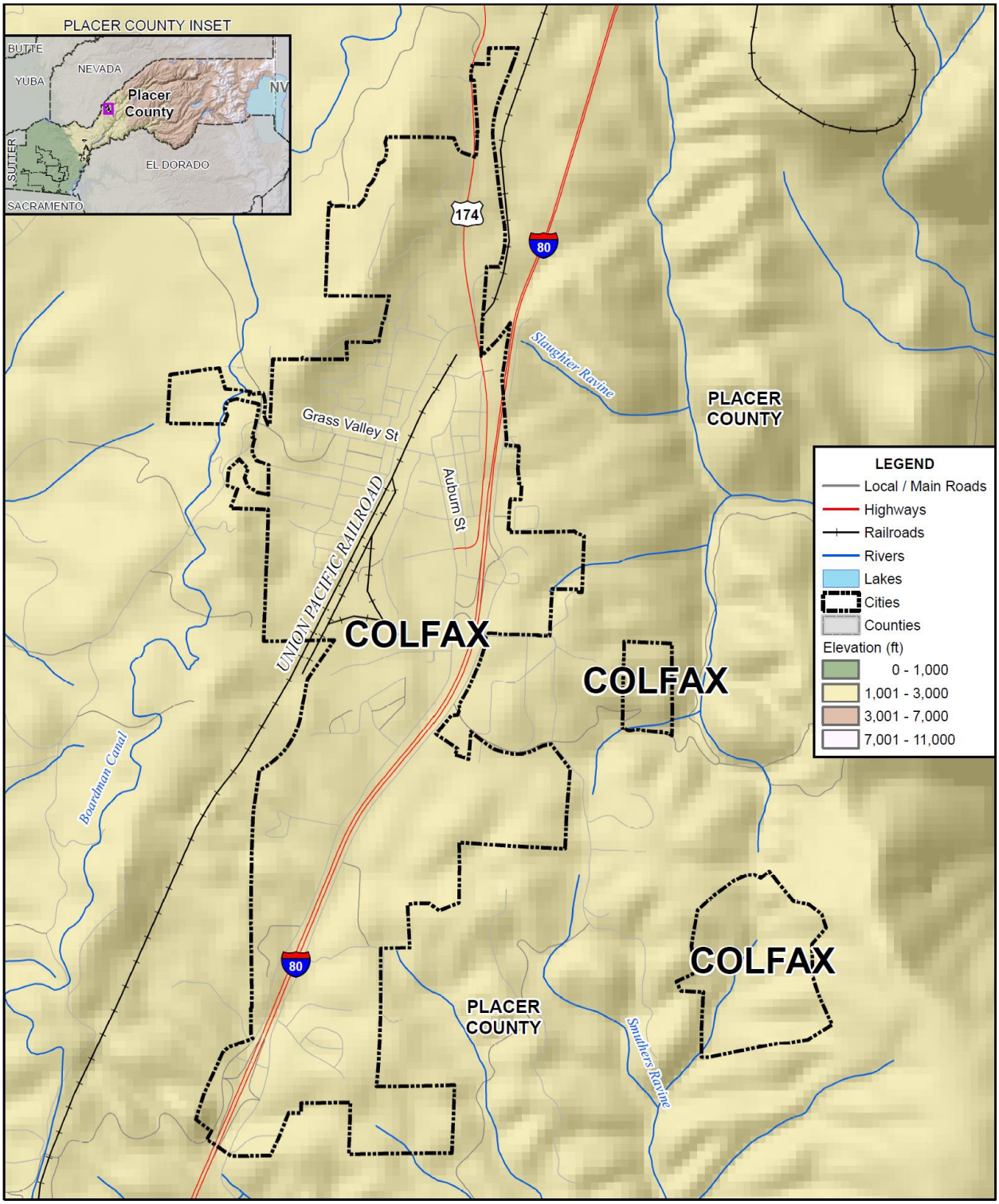
Table B-2 2016 LHMP Incorporation

Planning Mechanism 2016 LHMP Was Incorporated/Implemented In.	Details: How was it incorporated?
None	There was no related mitigation planning. The General Plan is being updated in 2021 and the LHMP will be incorporated into it.

B.3 Community Profile

The community profile for the City of Colfax is detailed in the following sections. Figure B-1 displays a City map and the location of Colfax within Placer County.

Figure B-1 City of Colfax



Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

B.3.1. Geography and Climate

The City of Colfax is the northern-most incorporated city in Placer County, located in the Sierra Nevada Foothills at a general elevation of 2,400 feet above msl. The City covers an area of 1.3 square miles and straddles I-80. Colfax sits a few miles outside the Tahoe National Forest as I-80 begins its climb into the Sierras. The City of Colfax sits at approximately 2,425 feet above mean sea level.

Colfax average temperatures range from the low 80°F to low 90°F during the summer to the mid 30°F to low 40°F during the winter. Colfax receives an average of 45.59 inches of rain and 18.9 inches of snow annually.

B.3.2. History

Colfax was originally inhabited by the Maidu Indians. In 1849 during the frenetic days of the Gold Rush, southeast of present-day Colfax, Illinoistown (previously known as Alder Grove) rose as a major supply hub for the Sierra Foothill mining camps. In 1865, destiny doomed the thriving community when transcontinental railroad engineers bypassed it. Railroad construction Camp 20 became the town site of choice. Camp 20 was later renamed Colfax in honor of Schuyler Colfax, who visited the town in 1865 when he was Speaker of the House, assuring the construction crew that the government was committed to completing the transcontinental railroad. The town went on to become a major switching and maintenance station for the Central Pacific and Southern Pacific, and in 1876 a terminus for the Nevada County Narrow Gauge Railroad, serving the fruit orchards of the area and Nevada County gold mines. Colfax was incorporated as a city in 1910.

B.3.3. Economy

Colfax is the home several major employers: GKM Corporation, Winner Chevrolet, Placer Union High School District, Hills Flat Lumber, Crispin Cider, and Sierra Market. US Census estimates show economic characteristics for the City of Colfax. These are shown in Table B-3 and Table B-4. Mean household income in the City was $57,734. Median household income in the City was $70,575.

Table B-3 City of Colfax – Civilian Employed Population 16 years and Over

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	20	2.1%
Construction	99	2.1%
Manufacturing	69	10.2%
Wholesale trade	57	7.1%
Retail trade	177	5.9%
Transportation and warehousing, and utilities	56	18.3%
Information	8	5.8%
Finance and insurance, and real estate and rental and leasing	91	0.8%

Industry	Estimated Employment	Percent
Professional, scientific, and management, and administrative and waste management services	70	9.4%
Educational services, and health care and social assistance	150	7.2%
Arts, entertainment, and recreation, and accommodation and food services	66	15.5%
Other services, except public administration	38	6.8%
Public administration	77	3.9%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

Table B-4 City of Colfax – Income and Benefits

Income Bracket	Percent
<$10,000	5.8%
$10,000 – $14,999	13.6%
$15,000 - $24,9999	9.4%
$25,000 – $34,999	5.0%
$35,000 – $49,999	9.5%
$50,000 – $74,999	21.2%
$75,000 – $99,999	13.9%
$100,000 – $149,999	14.7%
$150,000 – $199,999	1.4%
$200,000 or more	5.5%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

B.3.4. Population

The California Department of Finance estimated the January 1, 2020 total population for the City of Colfax was 2,152.

B.4 Hazard Identification

Colfax's identified the hazards that affect the City and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to Colfax (see Table B-5).

Table B-5 City of Colfax—Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/ Severity	Significance	Climate Change Influence
Agricultural Hazards	Limited	Unlikely	Negligible	Low	Medium
Avalanche	Limited	Unlikely	Negligible	Low	Medium
Climate Change	Extensive	Likely	Limited	Low	–
Dam Failure	Limited	Unlikely	Negligible	Low	Medium
Drought & Water Shortage	Significant	Likely	Critical	Medium	High
Earthquake	Significant	Occasional	Critical	Low	Low
Floods: 1%/0.2% annual chance	Limited	Unlikely	Negligible	Low	Medium
Floods: Localized Stormwater	Significant	Occasional	Limited	Low	Medium
Landslides, Mudslides, and Debris Flows	Limited	Occasional	Limited	Low	Medium
Levee Failure	Limited	Unlikely	Negligible	Low	Medium
Pandemic	Extensive	Likely	Critical	Medium	Medium
Seiche	Limited	Unlikely	Negligible	Low	Medium
Severe Weather: Extreme Heat	Significant	Likely	Limited	Medium	High
Severe Weather: Freeze and Snow	Significant	Likely	Limited	Low	Medium
Severe Weather: Heavy Rains and Storms	Significant	Limited	Limited	Low	Medium
Severe Weather: High Winds and Tornadoes	Significant	Likely	Critical	Medium	Low
Tree Mortality	Significant	Likely	Catastrophic	High	High
Wildfire	Significant	Likely	Catastrophic	High	High

Geographic Extent
Limited: Less than 10% of planning area
Significant: 10-50% of planning area
Extensive: 50-100% of planning area

Likelihood of Future Occurrences
Highly Likely: Near 100% chance of occurrence in next year, or happens every year.
Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less.
Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years.
Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years.

Magnitude/Severity
Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths.
Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability.
Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability.
Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid.

Significance
Low: minimal potential impact
Medium: moderate potential impact
High: widespread potential impact

Climate Change Influence
Low: minimal potential impact
Medium: moderate potential impact
High: widespread potential impact

B.5 Hazard Profile and Vulnerability Assessment

The intent of this section is to profile Colfax's hazards and assess the City's vulnerability separate from that of the Placer County Planning Area as a whole, which has already been assessed in Section 4.3 Hazard Profiles and Vulnerability Assessment in the Base Plan. The hazard profiles in the Base Plan discuss overall impacts to the Placer County Planning Area and describes the hazard problem description, hazard location and extent, magnitude/severity, previous occurrences of hazard events and the likelihood of future occurrences. Hazard profile information specific to the City is included in this Annex. This vulnerability assessment analyzes the property, population, critical facilities, and other assets at risk to hazards ranked of medium or high significance specific to the City (as identified in the Significance column of Table B-5) and also includes a vulnerability assessment to the three primary hazards to the State of California: earthquake, flood, and wildfire. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the Base Plan.

B.5.1. Hazard Profiles

Each hazard vulnerability assessment in Section B.5.3, includes a hazard profile/problem description as to how each medium or high significant hazard affects the City and includes information on past hazard occurrences and the likelihood of future hazard occurrence. The intent of this section is to provide jurisdictional specific information on hazards and further describes how the hazards and risks differ across the Placer County Planning Area.

B.5.2. Vulnerability Assessment and Assets at Risk

This section identifies Colfax's total assets at risk, including values at risk, populations at risk, critical facilities and infrastructure, natural resources, and historic and cultural resources. Growth and development trends are also presented for the community. This data is not hazard specific, but is representative of total assets at risk within the community.

Values at Risk

The following data from the Placer County Assessor's Office is based on the 2020 Assessor's data. The methodology used to derive property values is the same as in Section 4.3.1 of the Base Plan. This data should only be used as a guideline to overall values in the County, as the information has some limitations. The most significant limitations are created by Proposition 13 and the Williamson Act as detailed in the Base Plan. With respect to Proposition 13, instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the County. It is also important to note, in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table B-6 shows the 2020 Assessor's values and content replacement values (e.g., the values at risk) broken down by property type for the City.

Table B-6 City of Colfax – Total Values at Risk by Property Use

Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Agricultural	0	0	$0	$0	$0	$0
Commercial	118	70	$12,126,301	$21,608,886	$21,608,886	$55,344,073
Industrial	33	20	$9,487,797	$15,276,833	$22,915,248	$47,679,878
Institutional	13	9	$1,039,080	$5,047,655	$5,047,655	$11,134,390
Miscellaneous	166	3	$2,860,671	$20,892	$20,892	$2,902,455
Natural / Open Space	16	0	$0	$0	$0	$0
Residential	642	609	$39,484,118	$110,214,317	$55,107,156	$204,805,591
Colfax Total	**988**	**711**	**$64,997,967**	**$152,168,583**	**$104,699,837**	**$321,866,387**

Source: Placer County 2020 Parcel/Assessor's Data

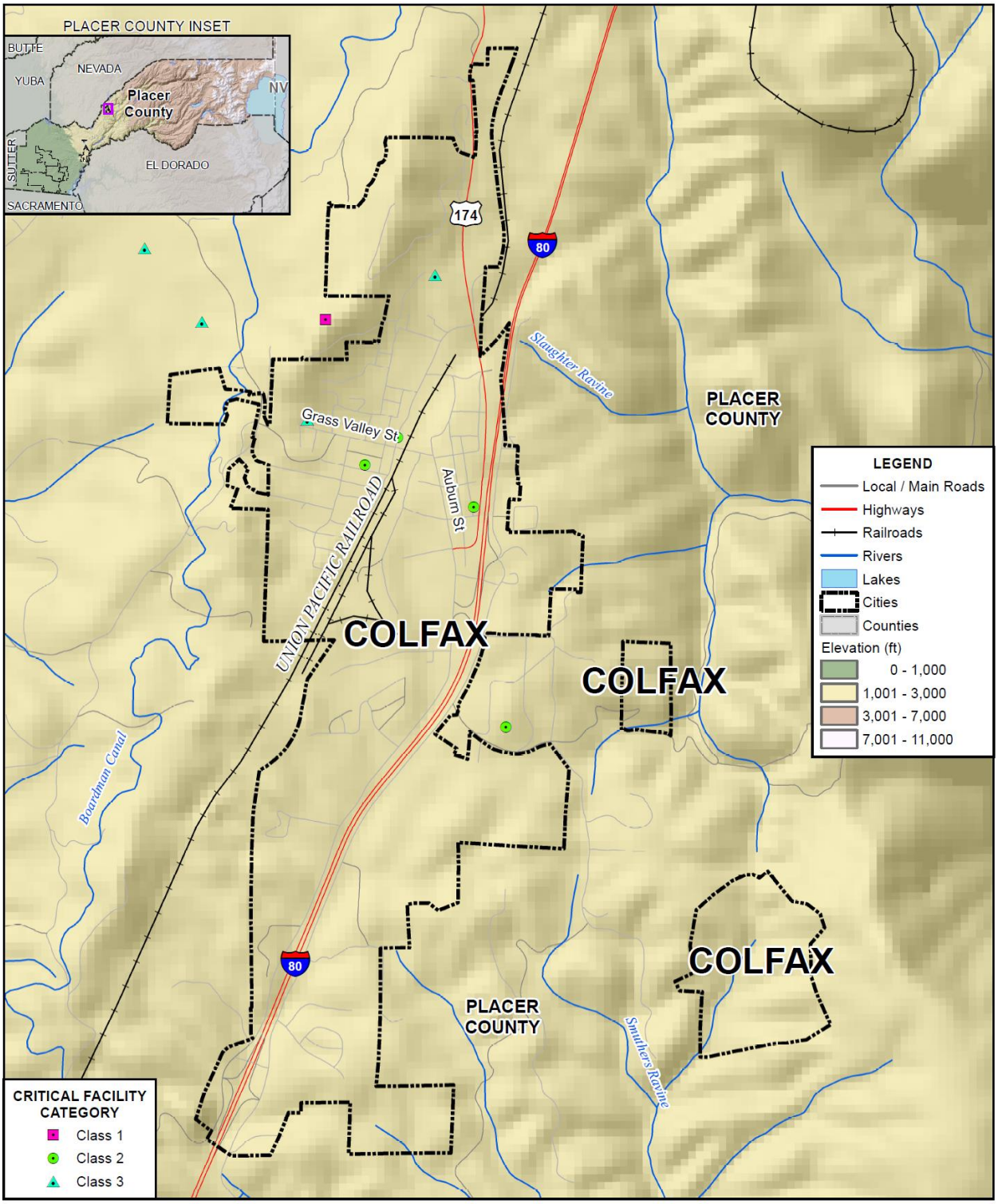
Critical Facilities and Infrastructure

Critical facilities and infrastructure are those buildings and infrastructure that are crucial to a community. Should these be damaged, it makes it more difficult for the community to respond to and recover from a disaster. For purposes of this plan, a critical facility is defined as:

> *Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.*

This definition was refined by separating out three classes of critical facilities as further described in Section 4.3.1 of the base plan. An inventory of critical facilities in the City of Colfax from Placer County GIS is shown on Figure B-2 and detailed in Table B-7. Details of critical facility definition, type, name, address, and jurisdiction by hazard zone are listed in Appendix F.

Figure B-2 City of Colfax – Critical Facilities



Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table B-7 City of Colfax – Critical Facilities

Critical Facility Class	Critical Facility Type	Facility Count
Class 2	Fire Station	2
Class 3	Police Station	1
	Hall	1
	Water Treatment Plant	1
Colfax Total		**5**

Source: Placer County GIS

Natural Resources

Natural resources are unique to each area and are difficult to replace. Should a natural disaster occur, these species and locations are at risk. The City of Colfax has a variety of habitat types that include urban, annual grasslands, seasonal wetlands, riparian zones, and oak savannah woodlands. These environments support plant and wildlife that include protected and special status species listed in the Table B-8.

Table B-8 Threatened Species in the City of Colfax Planning Area

Common name	Scientific Name	Federal Status*	State Status
Birds			
Fringed myotis	*Myotis thysanodes*	SC	–
Long-eared myotis	*Myotis evotis*	SC	–
Long-legged myotis	*Myotis volans*	SC	–
Small-footed myotis	*Myotis ciliolabrum*	SC	–
Spotted bat	*Euderma macalatum*	SC	SSC
Yuma myotis bat	*Myotis yumanensis*	SC	SSC
Black swift	*Cypseloides niger*	SC, MNBMC	SSC
Vaux's swift	*Chaetura vauxi*	–	SSC
Prairie falcon	*Falco mexicanus*	MNBNC	SSC
Lawrence's golfinch	*Carduells lawrencei*	SC, MNBMC	–
Bank swallow	*Riparia*	–	T
Tricolored blackbird	*Agelalus tricolor*	SC, MNBMC	SSC
Loggerhead shrike	*Lanius ludovicianus*	SC, MNBMC	SSC
Bald eagle	*Haliaeetus leucocephalus*	T	E
Northern goshawk	*Accipeter gentilis*	SC	SSC
Insects			
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	–
Shirttail Creek stonefly	*Megaleuctra sierra*	SC	–
Sagehen Creek goracean caddisfly	*Goracea oregano*	SC	–
Spiny rhyacophilan caddisfly	*Rhyacophila spinata*	SC	–

Common name	Scientific Name	Federal Status*	State Status
Amphibians			
Foothill yellow legged frog	*Rana boylii*	SC	SSC
California red-legged frog	*Rana aurora dratonii*	T	SSC
Northwestern pond turtle	*Clemmys marmorat marmorata*	SC	SSC
California horned lizard	*Phrynosoma coronatum frontale*	SC	SSC
***Status explanations**			
Federal E – listed as endangered under the federal Endangered Species Act T – listed as threatened under the federal Endangered Species Act MNBMC – Fish and Wildlife Service: Migratory Nongame Birds of Management Concern SC = species of concern, formerly Category 2 candidate for federal listing – = no listing status		State E = listed as endangered under the California Endangered Species Act T = listed as threatened under the California Endangered Species Act SSC = species of special concern – = no listing status	

Source: City of Colfax Wastewater Treatment Plant Improvements Project Environmental Impact Report (2004)

Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk.

The City of Colfax has a stock of historically significant homes, public buildings, and landmarks. To inventory these resources, the HMPC collected information from a number of sources. The California Department of Parks and Recreation Office of Historic Preservation (OHP) was the primary source of information. OHP administers the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest programs. Each program has different eligibility criteria and procedural requirements. These requirements are detailed in Section 4.3.1 of the Base Plan. Table B-9 lists the historical buildings in the City.

Table B-9 City of Colfax – Historical Resources

Resource Name (Plaque Number)	National Register	State Landmark	Point of Interest	Date Listed	City
Colfax Freight Depot (N2076)	X			12/17/1999	Colfax
Colfax Passenger Depot (N2044)	X			1/15/1999	Colfax
First Transcontinental Railroad-Colfax (780)		X		11/20/1962	Colfax
Stevens Trail (N2181)	X			11/20/2002	Colfax

Source: California Department of Parks and Recreation Office of Historic Preservation, http://ohp.parks.ca.gov/ retrieved on 12/6/2020

In addition to the registered sites, there are several assets within Colfax that define the community and represent the City's history. Some of the historical sites of importance to Colfax are listed below.

- Neff House at 55 West Grass Valley St.
- The Colfax Hotel at Grass Valley St. and Railroad St.
- Chamber of Commerce Rail Car

- Perkins-Lobner Victorian on Railroad St.
- Colfax Fruit Sheds
- Lincoln Highway and Highway 40 routes went through the City
- Schuyler Colfax statue at Grass Valley St. and Railroad St.
- Northwestern Pacific Caboose, Number 28 at Main St. and Grass Valley St.
- Fire Bell Tower at the north end of the Colfax Freight Depot
- Hydraulic Monitor at the foot of the flagpole on North Main St.
- Judge Jacob Kuenzly home at Depot St. and Pleasant St.
- Masonic Building and IOOF Building on North Main St.
- Colfax Record Newspaper building at 25 W. Church St.
- Colfax City Hall at 33 South Main St.
- Colfax Theater at 49 South Main St.
- Building currently housing the Colfax Branch Library at South Main St. and Church St.
- All of the other buildings along the west side of North and South Main St.
- Colfax Cemetery on North Canyon Way
- Cape Horn railroad roadbed

It should be noted that these lists may not be complete, as they may not include those currently in the nomination process and not yet listed. Additionally, as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), any property over 50 years of age is considered a historic resource and is potentially eligible for the National Register. Thus, in the event that the property is to be altered, or has been altered, as the result of a major federal action, the property must be evaluated under the guidelines set forth by CEQA and NEPA. Structural mitigation projects are considered alterations for the purpose of this regulation.

Growth and Development Trends

As part of the planning process, the HMPC looked at changes in growth and development, both past and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time. Information from the City of Colfax General Plan Housing Element, the California Department of Finance, the US Census Bureau form the basis of this discussion.

Historic Population Trends and Current Population

Population growth can increase the number of people living in hazard prone areas. Colfax has generally seen growth that has been mostly steady, with population losses occurring in the late 1960s. Colfax has seen growth rates as shown in Table B-10.

Table B-10 City of Colfax – Population Changes Since 1950

Year	Population	Change	% Change
1950	820	–	–
1960	915	95	59.2%
1970	798	-117	-12.8%
1980	981	183	22.9%
1990	1,306	333	33.1%

Year	Population	Change	% Change
2000	1,597	291	14.5%
2010[1]	1,963	364	22.9%
2020[2]	2,152	189	9.6%

Source: [1]US Census Bureau, [2]California Department of Finance

Special Populations and Disadvantaged Communities

The City noted that there are certain groups of people in the City who would need extra assistance in times of disaster. The City noted that there are 300 persons with disabilities in Colfax representing 14.8% of the total population and there are 220 seniors (65 years or more) accounting for one-quarter of the total population. Thirty (30) seniors have a disability. Canyon View Apartments (at 205 Canyon Ct., Colfax) is a senior affordable-housing development with 67 units (including one manager's unit).

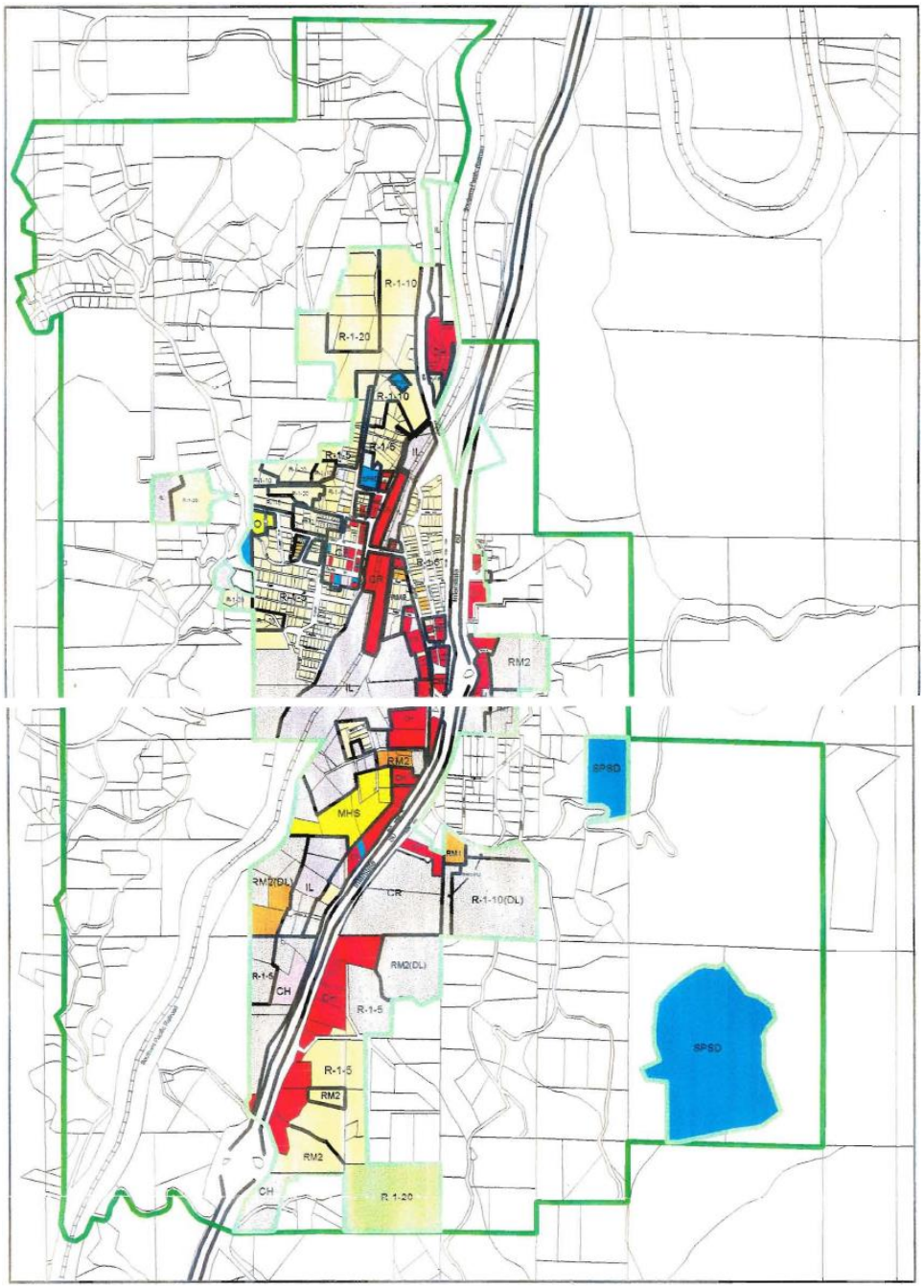
Persons with developmental disabilities include those with intellectual disabilities, cerebral palsy, epilepsy, and autism. There are 73 persons with a developmental disability in Colfax.

Land Use

State planning law requires that the land use element of a general plan include a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The City's land use designations are generally described below and mapped on the Land Use Diagram (Figure B-3). The Colfax Municipal Code provides detailed land use and development standards for development.

With this General Plan, a variety of new land use designations have been established to reflect the more mixed and, in some cases, more intense land uses envisioned for Colfax. New mixed-use designations provide the opportunity for a combination of residential, commercial, and office uses on a single site, depending on the designation. Future land use for the City of Colfax from the City of Colfax General Plan Land Use Element is shown on Figure B-3.

Figure B-3 City of Colfax – Land Use Diagram



Existing Land Use

- Agriculture
- Commercial
- Industrial
- Park
- School
- Quasi Public
- Residential
- Mobile Home
- Multiple Family Residential
- Religious
- Vacant

City of Colfax City Limits

1000 0 1000 feet

scale

Zoning Designations

- A-1 Agricultural
- SPSD Special Public Service District
- CH Commercial Highway
- CR Commercial Retail
- IL Limited Industrial
- DL Density Limitations
- O Open Space

R-1-5 Residential 5,000 Square Foot Maximum
R-1-10 Residnetial 10,000 Square Foot Maximum
R-1-20 Residential 20,000 Square Foot Maximum
RM1 Multiple Family Residential
RM2 Multiple Family Residential High Density

City of Colfax Sphere of Influence

Produced for California State University, Chico
In Cooperation with the Geographic Information Center
Cartography by Kent Johanns

N
W
E
S

Source: City of Colfax 1998 General Plan Land Use Element

Development since 2016 Plan

As discussed in Section 4.3.1 of the Base Plan, future development has occurred in the City since the last plan. Some of this has occurred in hazard prone areas. The City Building Department tracked total building permits issued since 2016 for the City. These are tracked by total development, property use type, and hazard risk area. These are shown in Table B-11 and Table B-12.

Table B-11 City of Colfax – Total Development Since 2016

Property Use	2016	2017	2018	2019	2020
Agricultural	0	0	0	0	0
Commercial	23	46	30	26	27
Industrial	0	1	0	0	0
Residential	63	67	46	74	71
Unknown	0	0	0	0	0
Total	**86**	**114**	**76**	**100**	**98**

Source: City of Colfax Building Department

Table B-12 City of Colfax – Development in Hazard Areas since 2016

Property Use	1% Annual Chance Flood	Levee Protected Area	Wildfire Risk Area[1]	Other
Agricultural	0	0	0	0
Commercial	0	0	152	0
Industrial	0	0	1	0
Residential	0	0	321	0
Unknown	0	0	0	0
Total	**0**	**0**	**474**	**0**

Source: City of Colfax Building Department

[1]Moderate or higher wildfire risk area

Future Development

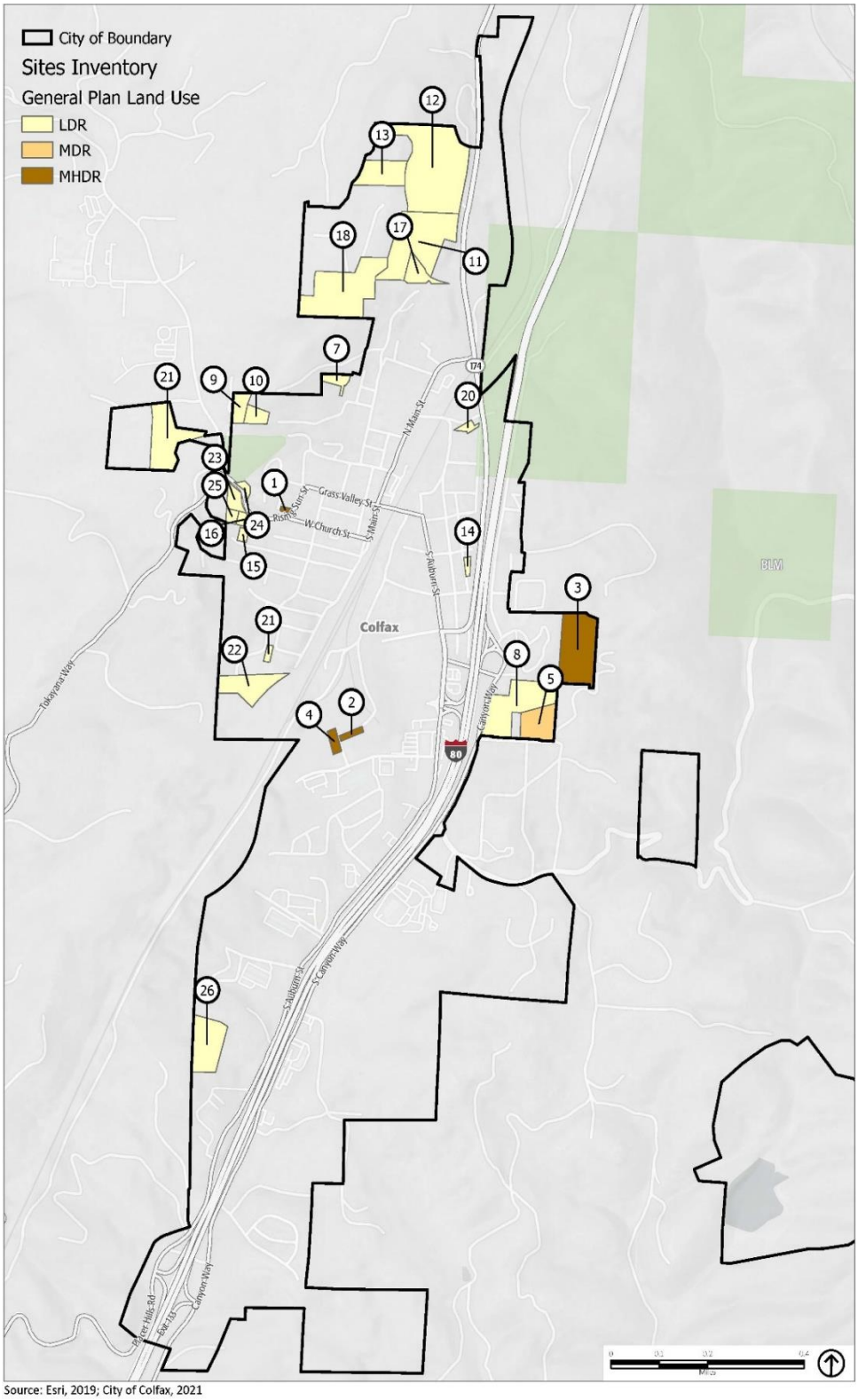
New development in Colfax continues to be slow. While there are a few areas for new development, the majority of the undeveloped land in the City is very sloped and therefore challenging to build. Development projects recently approved or under construction include the following:

- Village Oaks – 38-lot single-family lot subdivision adjacent to Pine Top Apartments on south side of Iowa Hill Road (APN: 101-170-029). Construction anticipated to commence in late 2021.
- Sierra Oaks- 34-lot single-family subdivision on Sierra Oaks Drive adjacent to the Village Oaks subdivision. Home construction underway with completion of all 33 homes anticipated by early 2022.
- Best Western Hotel – three-story 69-room hotel under construction on South Auburn Street (APN: 100-230-022, 023 and 024).
- Shadow Wood – 20-lot single-family small lot subdivision on 101 through 120 Shadow Wood Place. Project will be complete around the end of 2021.The Sacramento Council on Governments (SACOG) modeled population projections for the City of Colfax and other areas of the region in 2016 for a

Metropolitan Transportation Plan/Sustainable Communities Strategy report. This forecast uses a 2012 base year estimate with projections to 2020 and 2065 for population, housing units, households and employment. SACOG estimated the City population in 2020 and 2035 to be 2,078 and 2,297 respectively.

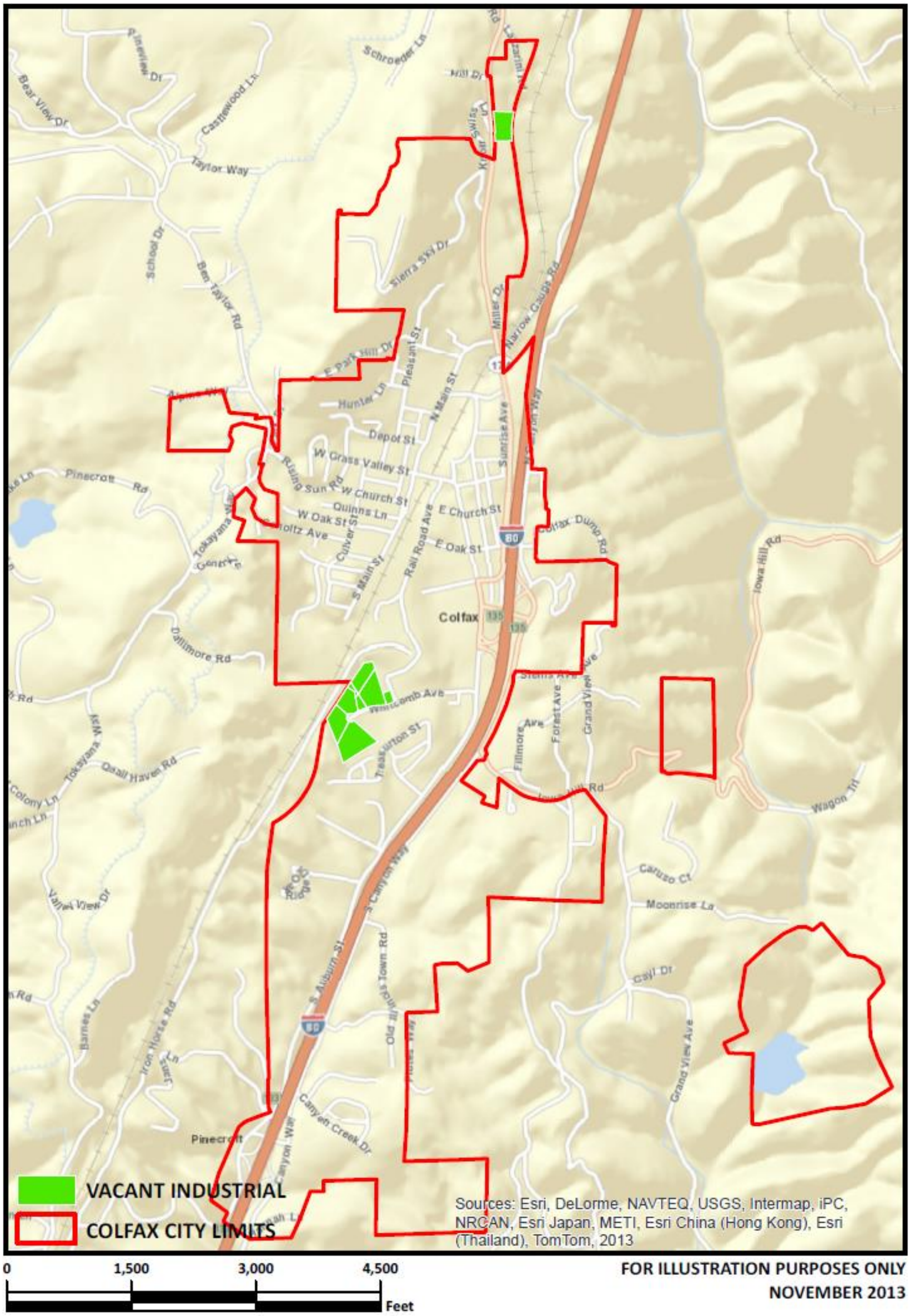
In the City's 2013-20121 Housing Element, maps of vacant residential and industrial lands were created. These are areas where future development could occur in the City. These are shown in Figure B-4 and Figure B-5.

Figure B-4 City of Colfax – Residential Vacant Land Inventory Map



Source: 2013-2021 City of Colfax Housing Element

Figure B-5 City of Colfax – Industrial Vacant Land Inventory Map



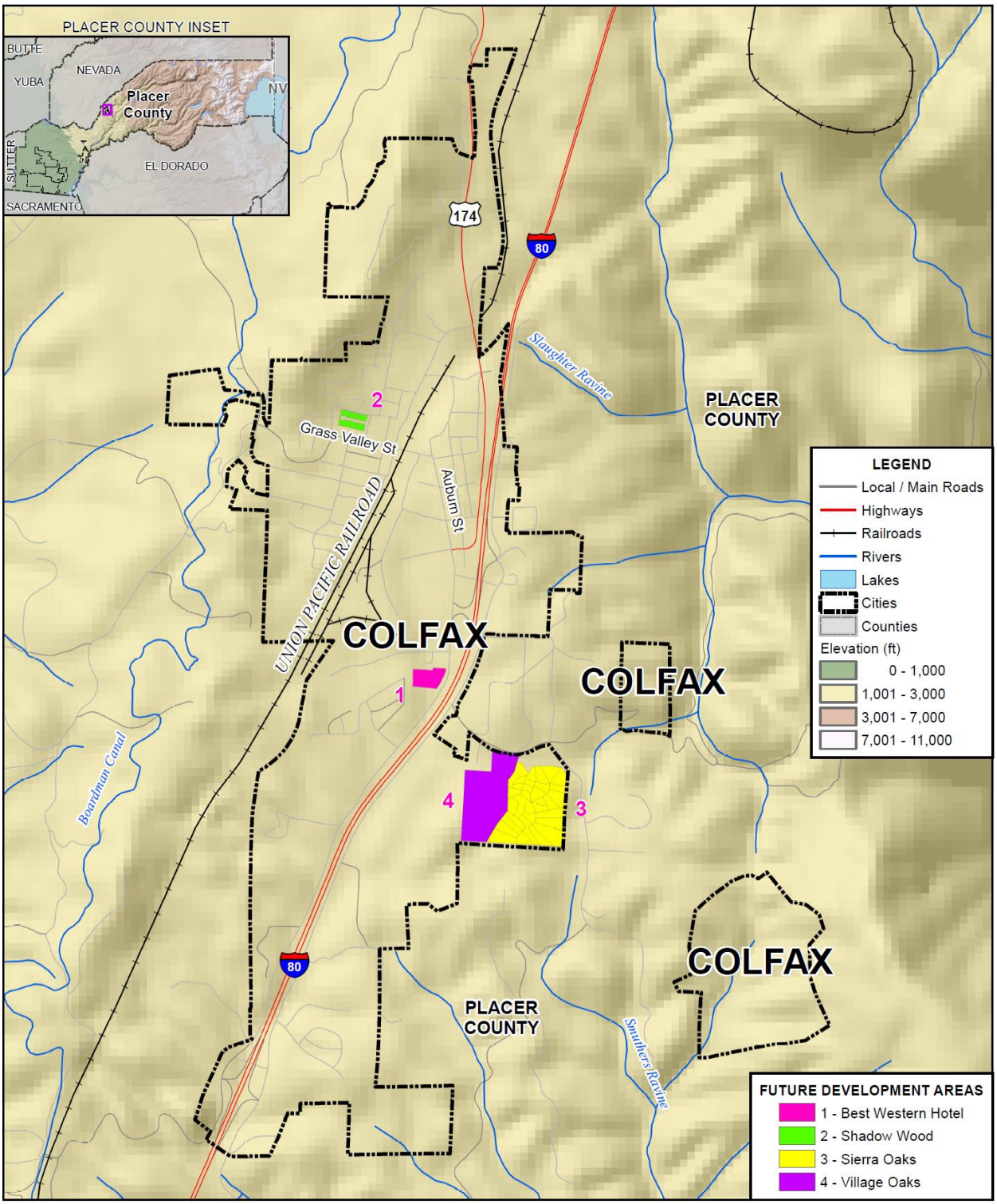
Source: 2013-2021 City of Colfax Housing Element

More general information on growth and development in Placer County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Placer County Vulnerability and Assets at Risk of the Base Plan.

GIS Analysis

Using GIS, the following methodology was used in determining parcel counts and acreages with future development projects in the City of Colfax. Future development areas in the City were provided in mapped format by the City. 4 areas were provided. Using the GIS parcel spatial file for each of these areas, the 4 areas and 56 parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure B-6 shows the locations of future development areas the City is planning to develop. Table B-13 shows the parcels and acreages of each future development area in the City.

Figure B-6 City of Colfax – Future Development Areas



Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table B-13 City of Colfax – Future Development Area Parcel and Acre Counts

Future Development	Total Parcel Count	Improved Parcel Count	Total Acres
Best Western Hotel	1	0	2
Shadow Wood	20	0	1
Sierra Oaks	34	10	19
Village Oaks	1	0	13
Grand Total	**56**	**10**	**35**

Source: City of Colfax

B.5.3. Vulnerability to Specific Hazards

This section provides the vulnerability assessment, including any quantifiable loss estimates, for those hazards identified above in Table B-5 as high or medium significance hazards. Impacts of past events and vulnerability of the City to specific hazards are further discussed below (see Section 4.1 Hazard Identification in the Base Plan for more detailed information about these hazards and their impacts on the Placer County Planning Area). Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.3 of the Base Plan.

An estimate of the vulnerability of the City to each identified priority hazard, in addition to the estimate of likelihood of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

Depending on the hazard and availability of data for analysis, this hazard specific vulnerability assessment also includes information on values at risk, populations at risk, critical facilities and infrastructure, and future development.

Drought & Water Shortage

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

Drought is a complex issue involving many factors—it occurs when a normal amount of precipitation and snow is not available to satisfy an area's usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water is the most critical issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. As the population in the area continues to grow, so will the demand for water.

Location and Extent

Drought and water shortage are regional phenomenon. The whole of the County, as well as the whole of the City, is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- D0 – Abnormally dry
- D1 – Moderate Drought
- D2 – Severe Drought
- D3 – Extreme drought
- D4 – Exceptional drought

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time, which does not usually affect water shortages and for longer periods. Should a drought last for a long period of time, water shortage becomes a larger issue. Current drought conditions in the City and the County are shown in Section 4.2.11 of the Base Plan.

Past Occurrences

There have been two state and one federal disaster declaration from drought. This can be seen in Table B-14.

Table B-14 Placer County – State and Federal Drought Disaster Declarations 1950-2020

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Drought	1	2014	1	1977

Source: Cal OES, FEMA

Since drought is a regional phenomenon, past occurrences of drought for the City are the same as those for the County and includes 4 multi-year droughts since 1950. Details on past drought occurrences can be found in Section 4.2.11 of the Base Plan. No losses or damage was reported as a result of the most recent drought (2014-2016).

Vulnerability to and Impacts from Drought and Water Shortage

Based on historical information, the occurrence of drought in California, including the City, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users.

The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservation measures during extended droughts. During these times, the costs of water can also increase. The increased dry fuels and fuel loads associated with drought conditions can also result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts.

Other qualitative impacts associated with drought in the planning area are those related to water intensive activities such as, municipal usage, commerce, tourism, recreation and agricultural use. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

The impact of a drought on the City of Colfax is primarily one of water supply; however, the impact to natural resources in the area is also a concern. In addition, drought conditions contribute to increased wildfire risk. Domestic water for the City of Colfax is provided by the Placer County Water Agency. The source of water for the City of Colfax is the South Fork of the Yuba River and the Bear River. The water is conveyed from Lake Spaulding via the PG&E Drum Canal, into the Agency's Boardman Canal, and then in a pipe to the Colfax Water Treatment Plant. Near the City's ballpark, the Agency has an additional 1.0 million gallon reservoir.

A multiple year drought can severely compromise the water supply within the district and adversely impact natural resources. Most recently, after 2 years of below-average rainfall and very low snow-melt run off, Governor Brown, in 2014, declared a state of emergency for drought conditions statewide. The final California Department of Water Resources showed snowpack water content at only 5 percent of normal. With the unknowns of drought and globally changing climate conditions, the City continues to promote water conservation throughout the community.

Future Development

As the population in the area continues to grow, so will the demand for water. Ongoing planning will be needed by the City and water agencies to account for population growth and increased future water demands.

Flood: 1%/0.2% Annual Chance

Likelihood of Future Occurrence–Occasional/Unlikely
Vulnerability–Low

Although ranked as a low significance hazard by the City, due to its significance in the County and in the State of California, the flood hazard assessment for Colfax is included here.

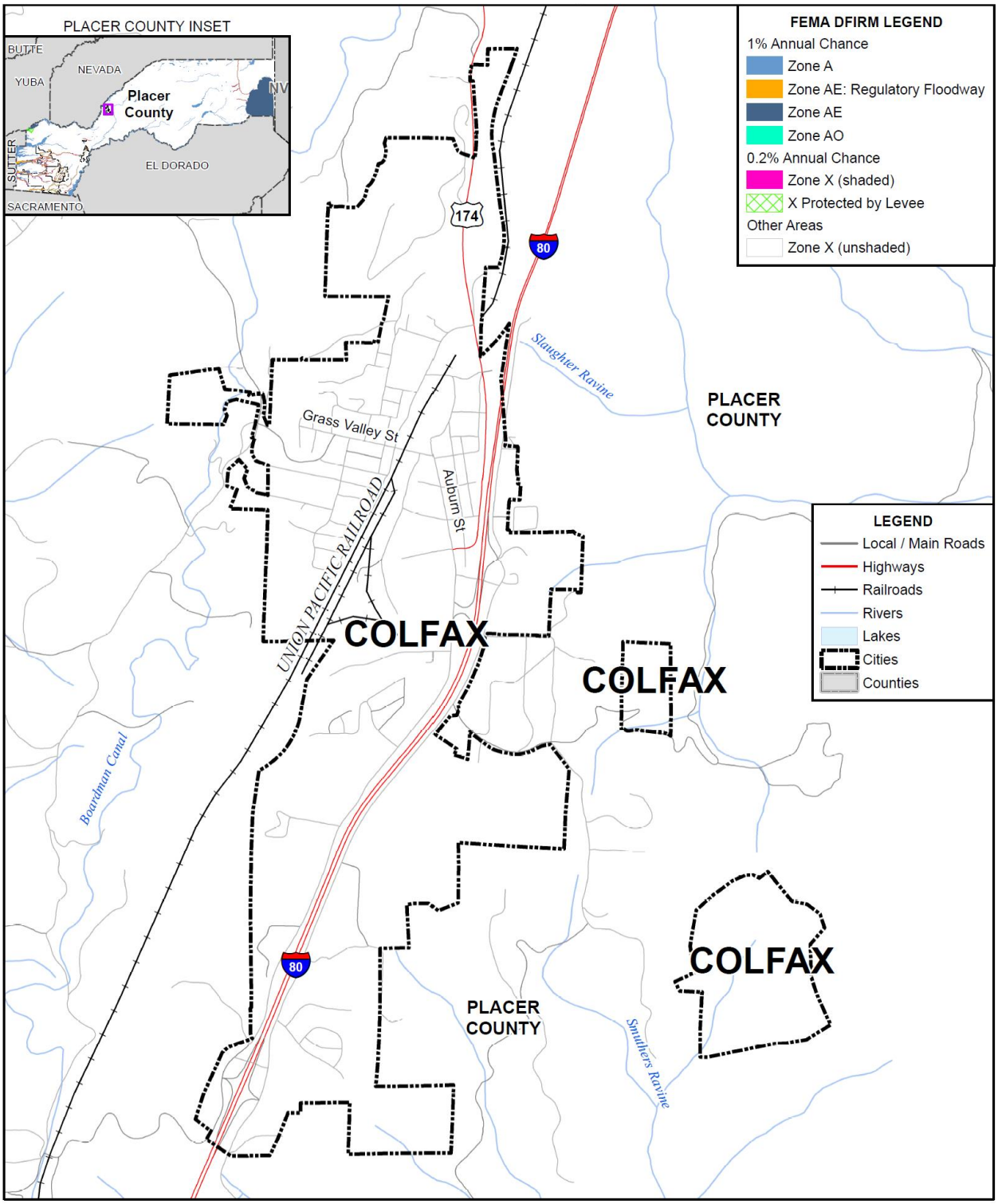
Hazard Profile and Problem Description

This hazard analyzes the FEMA DFIRM 1% and 0.2% annual chance floods. These tend to be the larger floods that can occur in the County or in the City, and have caused damages in the past. Flooding is a significant problem in Placer County. Flooding generally is not a significant hazard to the City of Colfax, but limited localized stormwater flooding has occurred occasionally during heavy rainfalls and is discussed in the Flood: Localized Stormwater Flooding section below.

Location and Extent

The City of Colfax is located outside the 1% and 0.2% annual chance flood zones. This is seen in Figure B-7.

Figure B-7 City of Colfax – FEMA DFIRM Flood Zones



Data Source: FEMA DFIRM 11/2/2018, Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table B-15 details the DFIRM mapped flood zones located within the City. As detailed below, Colfax is outside of any mapped FEMA flood hazard areas.

Table B-15 City of Colfax– DFIRM Flood Hazard Zones

Flood Zone	Description	Flood Zone Present in City of Colfax
A	1% annual chance flooding: No base flood elevations provided	
AE	1% annual chance flooding: Base flood elevations provided	
AE Floodway	1% annual chance flood: Regulatory floodway; Base flood elevations provided	
AO	1% annual chance flooding: sheet flow areas. BFEs derived from detailed hydraulic analyses are shown in this zone.	
Shaded X	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood	
X Protected by Levee	Areas protected by levees from 1% annual chance flood event. Levee protection places these areas in the 0.2% annual chance flood zone.	
X (unshaded)	No flood hazard	X

Source: FEMA

Flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the City vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the City tends to have a shorter speed of onset, due to the amount of water that flows through the City.

Geographical flood extents for the City from the FEMA DFIRMs are shown in Table B-16. Again, this illustrates that the City falls outside FEMA flood hazard areas as all of the City falls within the X-unshaded Zone.

Table B-16 City of Colfax – Geographical DFIRM Flood Zone Extents

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance	0	0.00%	0	0.00%	0	0.00%
0.2% Annual Chance	0	0.00%	0	0.00%	0	0.00%
Other Areas	794	100.0%	347	100.0%	447	100.0%
Total	**794**	**100.0%**	**347**	**100.0%**	**447**	**100.0%**

Source: FEMA DFIRM 11/2/2018

Past Occurrences

A list of state and federal disaster declarations for Placer County from flooding is shown on Table B-17. These events may have affected the City to some degree.

Table B-17 Placer County – State and Federal Disaster Declarations from Flood 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Flood (including heavy rains and storms)	16	1950, 1955, 1958 (twice), 1962, 1963, 1969, 1973, 1980, 1983, 1986, 1995 (twice), 1997, 2008, 2017	13	1955, 1958, 1962, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 2006 (twice), 2017

Source: Cal OES, FEMA

The City noted no other past occurrences of flooding.

Vulnerability to and Impacts from Flood

During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damages. Predominantly, the effects of flooding are generally confined to areas near the waterways of the County and the City. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat. This threatens structures in the floodplain. Structures can also be damaged from trees falling as a result of water-saturated soils. Electrical power outages happen, and the interruption of power causes major problems. Loss of power is usually a precursor to closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues. People may be swept away in floodwaters, causing injuries or deaths.

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Floods can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services. Standing water can cause damage to crops, roads, foundations, and electrical circuits. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts.

Assets at Risk

Based on the vulnerability of Colfax to the flood hazard, the sections that follow describes significant assets at risk in the City of Colfax. This section includes the values at risk, flooded acres, population at risk, and critical facilities at risk.

Insurance Coverage, Claims Paid, and Repetitive Losses

The City of Colfax does not have any FEMA floodplains and thus does not participate in the NFIP nor the CRS. As a result they do not track this information. Thus, there are no identified Repetitive Loss properties in the City.

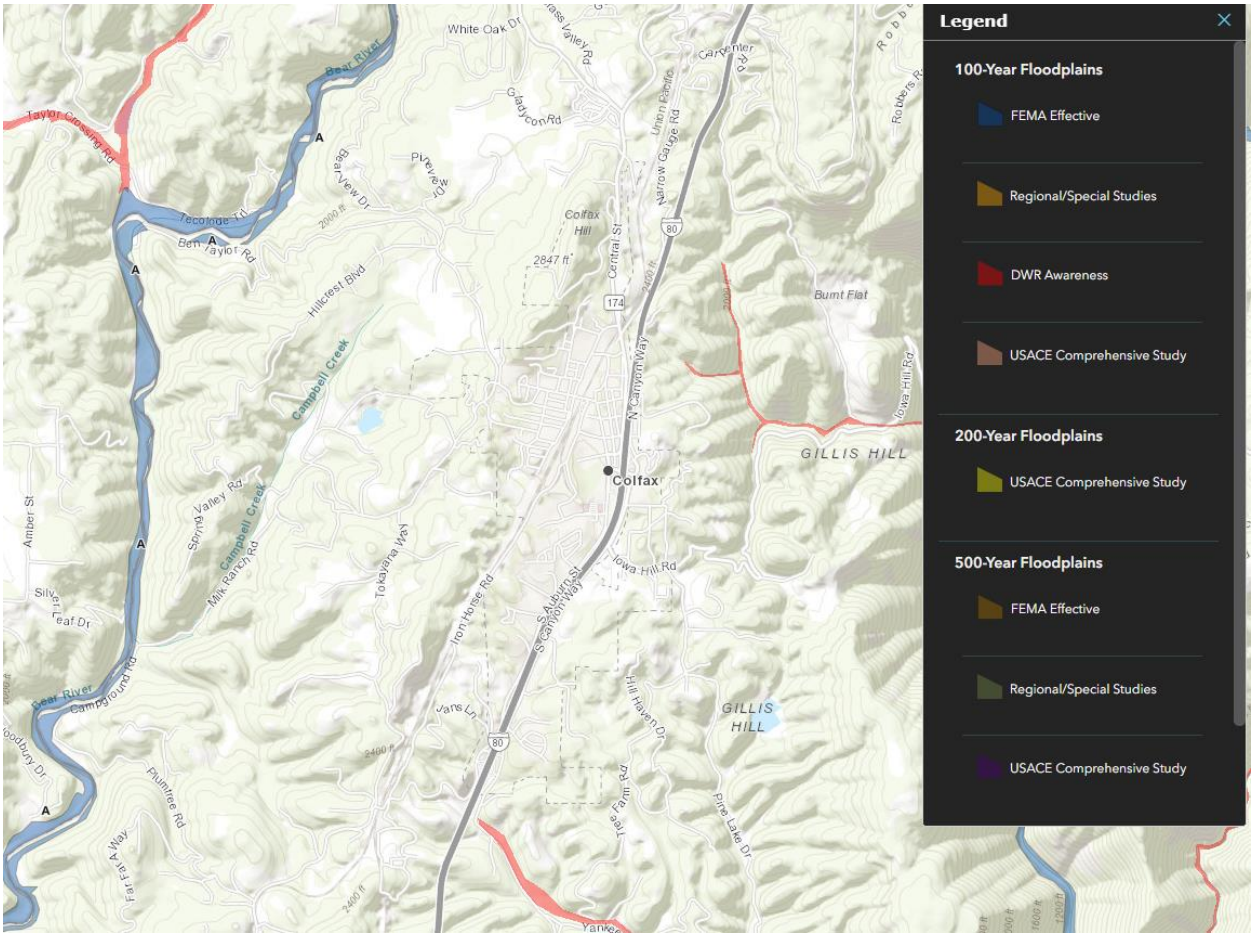
California Department of Water Resources Best Available Maps (BAM)

The FEMA regulatory maps provide just one perspective on flood risks in Placer County. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed. This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements.

The value in the BAMs is that they provide a bigger picture view of potential flood risk to the City than that provided in the FEMA DFIRMs. The BAM map for Colfax is shown in Figure B-8. This map further illustrates the lack of a significant flood hazard in the City.

Figure B-8 City of Colfax – Best Available Map



Source: California DWR

Legend explanation: Blue - FEMA 1%, Orange – Local 1% (developed from local agencies), Red – DWR 1%r (Awareness floodplains identify the 1% annual chance flood hazard areas using approximate assessment procedures.), Pink – USACE 1% (2002 Sac and San Joaquin River Basins Comp Study), Yellow – USACE 0.5% (2002 Sac and San Joaquin River Basins Comp Study), Tan – FEMA 0.2%, Grey – Local 0.2% (developed from local agencies), Purple – USACE 0.2% (2002 Sac and San Joaquin River Basins Comp Study).

Future Development

The City of Colfax does not have any FEMA flood hazard zones and thus future development will all occur outside the FEMA flood zones.

Pandemic

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

According to the World Health Organization (WHO), a disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. A pandemic may occur

when a new virus appears against which the human population has no immunity. It is important to realize that this LHMP Update does not examine pandemic contingency plans, but instead focuses on examining the risk of a normal hazard occurrence.

A pandemic occurs when a new virus emerges for which people have little or no immunity, and for which there is no vaccine. This disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in a very short time. The U.S. Centers for Disease Control and Prevention has been working closely with other countries and the World Health Organization to strengthen systems to detect outbreaks of that might cause a pandemic and to assist with pandemic planning and preparation. An especially severe a pandemic could lead to high levels of illness, death, social disruption, and economic loss.

Location and Extent

During a pandemic, the whole of the City, County, and surrounding region is at risk, as pandemic is a regional, national, or international event. The speed of onset of pandemic is usually short, while the duration is variable, but can last for more than a year as shown in the 1918/1919 Spanish Flu. There is no scientific scale to measure the magnitude of pandemic. Pandemics are usually measured in numbers affected by the pandemic, and by number who die from complications from the pandemic.

Past Occurrences

There has been one state and federal disaster declaration due to pandemic, as shown in Table B-18.

Table B-18 Placer County – State and Federal Pandemic Disaster Declarations 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Pandemic	1	2020	1	2020

Source: Cal OES, FEMA

The 20th century saw three outbreaks of pandemic flu.

- The **1918-1919 Influenza Pandemic (H1N1)**
- The **February 1957-1958 Influenza Pandemic (H2N2)**
- The **1968 Influenza Pandemic (H3N2)**

To date, the 21st century has seen two acknowledged pandemics.

- **2009 Swine Flu (H1N1**)
- **2019/2020 COVID 19**

To limit the spread of COVID 19, stay-at-home orders were issued by the State of California and schools, churches, businesses and government offices were closed with only essential services allowed to continue in-person operation. Many functions transitioned to the internet and as the spread of the disease waxed and waned with multiple waves of new cases, restrictions were increased and then eased as hospitalizations and positivity rates declined. Colfax City Hall closed in March 2020 when the stay-at-home orders were issued

by California and administrative functions transitioned to the internet. Businesses activity dropped precipitously and sales tax revenue to the City dropped sharply with a 22% decrease in the second quarter of 2020 from the second quarter of 2019 and an 11% decrease in fiscal year 2020/2021 from fiscal year 2019/2020.

Vulnerability to and Impacts from Pandemic

Pandemic has and will continue to have impacts on human health in the region. A pandemic occurs when a new virus emerges for which there is little or no immunity in the human population; the virus causes serious illness and spreads easily from person-to-person worldwide. There are several strategies that public health officials can use to combat pandemic. Constant surveillance regarding current pandemic, use of infection control techniques, and administration of vaccines once they become available. Citizens can help prevent spread of a pandemic by staying home, or "self-quarantining," if they suspect they are infected. Pandemic does not affect the buildings, critical facilities, and infrastructure in the City. Pandemic can have varying levels of impact to the citizens of the City and greater County, depending on the nature of the pandemic.

According to the American Community Survey, in 2018 the median household income in the City of Colfax was $49,571, 34% lower than the state median and 20% lower than the median for Placer County. Approximately 68 % of households in Colfax are lower income. While the overall case rate in Colfax was low relative to other areas of the County likely in large part due to its small size and rural surroundings, lower income households statewide experienced higher rates of infection, hospitalization, and negative effects of COVID 19.

Impacts could range from school and business closings to the interruption of basic services such as public transportation, health care, and the delivery of food and essential medicines. Hospitalizations and deaths can occur, especially to the elderly or those with pre-existing underlying conditions. As seen with Covid-19, multiple businesses were forced to close temporarily (some permanently) an unemployment rose significantly. Supply chains for food can be interrupted.

Future Development

Future development is not expected to be significantly impacted by this hazard, though population growth in the City could increase exposure to a pandemic, and increase the ability of each disease to be transmitted among the population of the City. If the median age of City residents continues to increase, vulnerability to pandemic diseases may increase, due to the fact that these diseases are often more deadly to senior citizens.

Severe Weather: Extreme Heat

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

According to FEMA, extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and lasts for several weeks. Heat kills by taxing the human body beyond its abilities. In extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature." Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat.

In addition to the risks faced by residents of the City, there are risk to the built environment from extreme heat. While extreme heat on its own does not usually affect structures, extreme heat during times of drought can cause wildfire risk to heighten. Extreme heat and high winds can cause Public Safety Power Shutdown (PSPS) events, creating significant issues in the City.

At least eight PSPS events affected the City of Colfax between October 14, 2018, and October 25, 2020. These events lasted between 11 hours (on September 25, 2019) to the longest power shut off that lasted almost 4 days (starting on October 26, 2019). In four events, power was shut off for more than 23 hours, in one event (starting on October 9, 2019) power was off for more than 61 hours and the longest event lasted three days, 18 hours and 27 minutes. These shut offs caused businesses, schools and government operations to temporarily stop. In response to the shut offs, PG&E installed a temporary micro grid to provide backup power generation for a small part of the community. Additional local generation capacity would reduce or eliminate the effects of the PSPS.

Location and Extent

Heat is a regional phenomenon and affects the whole of the City. Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. Heat waves do not strike victims immediately, but rather their cumulative effects slowly affect vulnerable populations and communities. Heat waves do not generally cause damage or elicit the immediate response of floods, fires, earthquakes, or other more "typical" disaster scenarios.

The NWS has in place a system to initiate alert procedures (advisories or warnings) when extreme heat is expected to have a significant impact on public safety. The expected severity of the heat determines whether advisories or warnings are issued. The NWS HeatRisk forecast provides a quick view of heat risk potential over the upcoming seven days. The heat risk is portrayed in a numeric (0-4) and color (green/yellow/orange/red/magenta) scale which is similar in approach to the Air Quality Index (AQI) or the UV Index. This can be seen in Section 4.2.2 of the Base Plan.

Past Occurrences

The City Planning Team noted that since extreme heat is a regional phenomenon, events that affected the County also affected the City. Those past occurrences were shown in the Base Plan in Section 4.2.2.

Vulnerability to and Impacts from Extreme Heat

The City experiences temperatures in excess of 100°F during the summer and early fall months. The temperature moves to 105-115°F in rather extreme situations. During these times, drought conditions may worsen and the City may see an increase in dry fuels. Also, PSPS events may occur during these times as well. Health issues are the primary concern with this hazard, although economic impacts can also be an issue, especially if power is shut off for an extended time. As detailed above, there were several extended power shutdowns in Colfax during time businesses were unable to operate.

The elderly and individuals below the poverty level are the most vulnerable to extreme temperatures. Nursing homes and elder care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning is not available. In addition, individuals below the poverty level may be at increased risk to extreme heat if use of air conditioning is not affordable. As noted above, almost 68% of the residents of Colfax have lower incomes than the County median. This is especially true of homeless people and the transient population.

Days of extreme heat have been known to result in medical emergencies, and unpredictable human behavior. Periods of extended heat and dryness (droughts) can have major economic, agricultural, and water resources impacts. Extreme heat can also dry out vegetations, making it more vulnerable to wildfire ignitions and spread.

Future Development

Future development of new buildings in the City will likely not be affected by extreme heat. Extreme heat is more likely to affect vulnerable populations and older structures that are not well insulated or have inefficient air conditioning systems. Vulnerability to extreme heat will increase as the average age of the population in each City shifts. It is encouraged that nursing homes and elder care facilities have emergency plans or backup power to address power failure during times of extreme heat and in the event of a PSPS. Low income residents and homeless populations are also vulnerable. Cooling centers for these populations should be utilized when necessary.

Tree Mortality

Likelihood of Future Occurrence–Likely
Vulnerability–High

Hazard Profile and Problem Description

One of the many vulnerabilities of drought in Placer County is the increased risk of widespread tree mortality events that pose hazards to people, homes, and community infrastructure, create a regional economic burden to mitigate, and contribute to future fuel loads in forests surrounding communities.

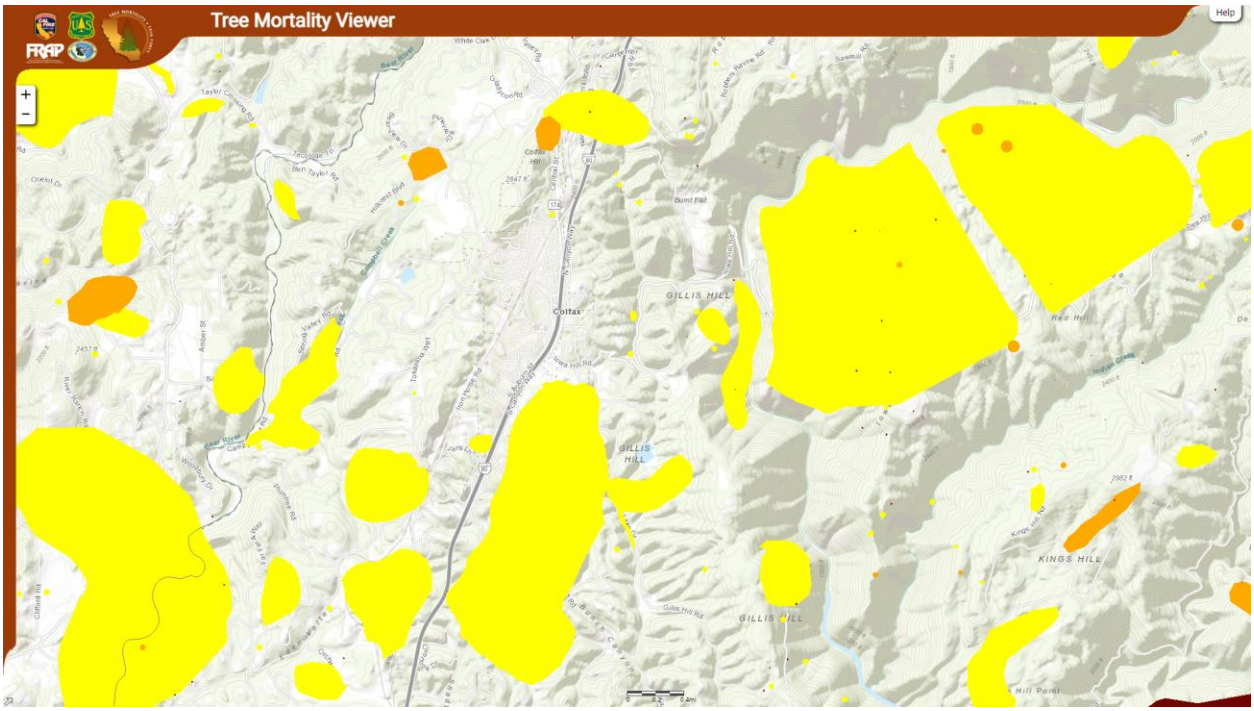
During extended drought, tree mortality is driven by a build-up in endemic bark beetle populations and exacerbated by latent populations of a suite of native insects and disease. Non-native forest pests (insects and/or pathogens) can also contribute to tree mortality events.

Location and Extent

Onset of tree mortality events can be relatively fast; however conditions – such as high stand densities – that lead to tree mortality accumulate slowly over time. Duration of tree mortality is lengthy, as once the tree dies, it remains in place until removed by human activity, wildfire, or breakdown of the wood by nature. Many areas in Placer County have seen increases in tree mortality. CAL FIRE has mapped these areas, which are shown for the City of Colfax on Figure B-9. Using a color legend, the map provided by CAL FIRE shows a scale of:

- Deep burgundy depicting areas with more than 40 dead trees per acre
- Red depicting 15 - 40 dead trees per acre
- Orange depicting 5 -15 dead trees per acre
- Yellow depicting 5 or less dead trees per acre

Figure B-9 City of Colfax – Tree Mortality Areas



Source: CAL FIRE

In the past decade, mortality has increased in the eastern portion of Placer County. During the 2012-2018 drought, the state of California Tree Mortality Task force designated multiple Tier 1 and Tier 2 High Hazard Zones where tree morality posed an elevated risk to human health, properties, and resource values. Placer County is designated as Tier 2 High mortality hazard on the watershed scale along with numerous Tier 1 High hazard "hot spots". A map of these areas was shown in in Section 4.3.18 of the Base Plan.

Past Occurrences

There have been no state or federal disasters in the County related directly to tree mortality, though it has most likely contributed to the intensity of past wildfires in the County. Those events are shown in the Past Occurrences section of Wildfire below. In 2015, then-Governor Edmund G. Brown Jr. proclaimed a state of emergency due to the extreme hazard of the dead and dying trees. Following the proclamation, 10 counties were determined to be most affected, which included Placer County. Placer County proclaimed a local emergency due to tree mortality conditions on Dec. 8, 2015.

No direct damage has been reported in Colfax due to tree mortality although, removal of large dead trees can cost several thousand dollars and place an undue financial burden on residents, two-thirds of which have low incomes.

Vulnerability to and Impacts from Tree Mortality

Dead trees are a hazard to the general public and forest visitors, but the risk of injury, death, property damage or infrastructure damages varies depending how the hazard interacts with potential targets. Dead trees within the wildland urban intermix or wildland urban interface or urban areas therefore pose a greater risk to due to their proximity to residents, businesses, and road, power, and communication infrastructure.

Dead trees may fall or deteriorate in their entirety or in part – either mechanism has the potential for injury, death, or inflicting severe damage to targets. As the time since tree mortality increases, so does the deterioration of wood and the potential for tree failure. Also at issue is the costs associated with tree removal. Tree Mortality has significantly added to the green waste issue in affected areas.

Placer County is unique in that many residential and business areas of the community are in the wildland urban interface/intermix with the forest. Trees in these interface/intermix areas are particularly vulnerable to insect and/or drought driven mortality because of the additional stressors that urban environments impose on trees (i.e. Soil compaction, altered hydrology, physical damage, heat islands etc.). This exacerbates the occurrence of tree mortality within the populated settings of the County.

The entire City of Colfax is in a very-high fire severity zone and tree mortality adds to the already high risk of wildfires in the community.

Future Development

Future development in wooded areas requires removal of undergrowth and of low hanging branches, careful selection of new vegetation that is fire resistant, and on-going maintenance.

Wildfire

Likelihood of Future Occurrence–Likely
Vulnerability–High

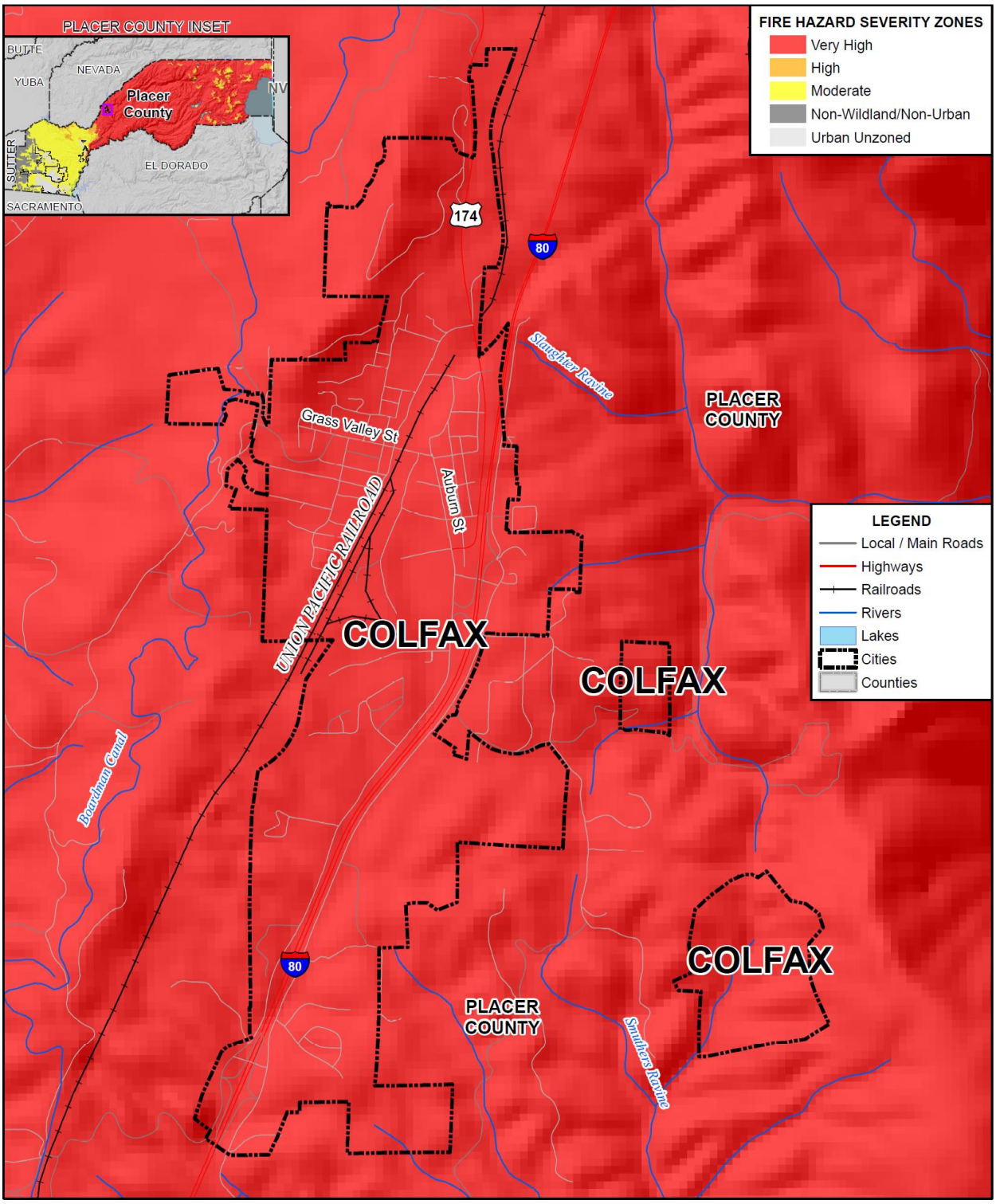
Hazard Profile and Problem Description

Wildland fire and the risk of a conflagration is an ongoing concern for the City of Colfax. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of the ecosystem. Wildland fires affect grass, forest, and brushlands, as well as any structures located within them. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These high winds can result in red flag days, and can result in PSPS events in the City. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urban areas.

Location and Extent

Wildfire can affect all areas of the City. CAL FIRE has estimated that the risk varies across the City and has created maps showing risk variance. Following the methodology described in Section 4.3.19 of the Base Plan, wildfire maps for the City of Colfax were created. Figure B-10 shows the CAL FIRE FHSZ in the City. As shown on the maps, the entirety of the City falls in the Very High FHSZ.

Figure B-10 City of Colfax – Fire Hazard Severity Zones



Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Wildfires tend to be measured in structure damages, injuries, and loss of life as well as on acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time, or may have durations lasting for a week or more. Geographical FHSZ extent from CAL FIRE is shown in Table B-19.

Table B-19 City of Colfax – Geographical FHSZ Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	794	100.0%	347	100.0%	447	100.0%
High	0	0.00%	0	0.00%	0	0.00%
Moderate	0	0.00%	0	0.00%	0	0.00%
Non-Wildland/non-Urban	0	0.00%	0	0.00%	0	0.00%
Urban Unzoned	0	0.00%	0	0.00%	0	0.00%
Total	**794**	**100.0%**	**347**	**100.0%**	**447**	**100.0%**

Source: CAL FIRE

Past Occurrences

There has been six state and five federal disaster declaration due to wildfire, as shown in Table B-20.

Table B-20 Placer County – State and Federal Wildfire Disaster Declarations 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Fire	5	1961, 1965, 1973, 1987, 2010	6	2002, 2004, 2008, 2009, 2014 (twice)

Source: Cal OES, FEMA

The 2004 Stevens Fire threatened the City.

Vulnerability to and Impacts from Wildfire

The wildfire hazard is one of the highest priority hazards in the County and City, and is the hazard with the greatest potential for catastrophic loss. High fuel loads in the County and Cities, along with geographical and topographical features, create the potential for both natural and human-caused fires that can result in loss of life and property. These factors, combined with natural weather conditions common to the area, including periods of drought, high temperatures, low relative humidity, and periodic winds, can result in frequent and sometimes catastrophic fires. The more urbanized areas within the County are not immune from fire. The dry vegetation and hot and sometimes windy weather, combined with continued growth in the WUI areas, results in an increase in the number of ignitions. Any fire, once ignited, has the potential to quickly become a large, out-of-control fire. As development continues throughout the County and City, especially in these interface areas, the risk and vulnerability to wildfires will likely increase.

Wildfire is a constant threat to the City of Colfax. The Safety Element of Colfax's General Plan notes that Colfax and the surrounding area is designated as a "very high hazard area", and wildland and wildland urban interface fires do occur relatively frequently. The Safety Element describes the following three factors that contribute to the wildfire hazard within the city and surrounding areas:

- A climatic pattern with long dry summers, clear skies with maximum solar radiation, high daytime summer temperatures, and extremely low relative humidity.
- Vegetation communities which often have adapted to this seasonal drought by becoming fire tolerant (e.g., chaparral), and have high fuel loading.
- Human settlement patterns which often are interspersed with areas of heavy vegetation/fuel accumulations along canyons, slopes, and foothill areas.

Much of Colfax is characterized by steep topography, narrow windy streets, and heavily vegetated hillsides. These areas present greater challenges for evacuation and access with fire-fighting apparatus. In the downtown, historic structures lack fire suppression systems and many buildings have connecting attics without fire walls to slow the spread of fire.

Potential impacts from wildfire include loss of life and injuries; damage to structures and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Wildfires can cause short-term and long-term disruption to the City. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the City by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the City; smoke and air pollution from wildfires can be a severe health hazard.

Although the physical damages and casualties arising from wildland-urban interface fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. Recently, the threat of wildfire, combined with the potential for high winds, heat, and low humidity, has caused PG&E to initiate a PSPS which can also significantly impact a community through loss of services, business closures, and other impacts associated with loss of power for an extended period. In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

Assets at Risk

Based on the vulnerability of Colfax to the wildfire hazard, the sections that follow describes significant assets at risk in the City of Colfax. This section includes the values at risk, population at risk, and critical facilities at risk.

Values at Risk

GIS was used to determine the possible impacts of wildfire within the City of Colfax. The methodology described in Section 4.3.19 of the Base Plan was followed in determining structures and values at risk in

fire hazard severity zones. Summary analysis results for Colfax are shown in Table B-21, which summarizes total parcel counts, improved parcel counts and their structure values by fire hazard severity zone.

Table B-21 City of Colfax – Count and Value of Parcels by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Very High	988	711	$64,997,967	$152,168,583	$104,699,837	$321,866,387
Colfax Total	**988**	**711**	**$64,997,967**	**$152,168,583**	**$104,699,837**	**$321,866,387**

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Table B-22 breaks out the Table B-21 by adding the property use details by fire hazard severity zone for the City. As shown in both of these tables, all of the City falls within the very high FHSZ.

Table B-22 City of Colfax – Count and Value of Parcels by Fire Hazard Severity Zone and Property Use

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Very High						
Agricultural	0	0	$0	$0	$0	$0
Commercial	118	70	$12,126,301	$21,608,886	$21,608,886	$55,344,073
Industrial	33	20	$9,487,797	$15,276,833	$22,915,248	$47,679,878
Institutional	13	9	$1,039,080	$5,047,655	$5,047,655	$11,134,390
Miscellaneous	166	3	$2,860,671	$20,892	$20,892	$2,902,455
Natural / Open Space	16	0	$0	$0	$0	$0
Residential	642	609	$39,484,118	$110,214,317	$55,107,156	$204,805,591
Very High Total	**988**	**711**	**$64,997,967**	**$152,168,583**	**$104,699,837**	**$321,866,387**
Colfax Total	**988**	**711**	**$64,997,967**	**$152,168,583**	**$104,699,837**	**$321,866,387**

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Population at Risk

The FHSZ dataset was overlayed on the parcel layer. Those residential parcel centroids that intersect the FHSZs were counted and multiplied by the 2010 Census Bureau average household factors for the City of Colfax – 2.45. According to this analysis, there is a total population of 1,401 residents of Colfax at risk to moderate or higher FHSZs. This is shown in Table B-23. It should be noted that this calculation is based on US Census Bureau averages for the City, in effect all 2,152 residents of the City would fall in the Very High FHSZ.

Table B-23 City of Colfax – Count of Improved Residential Parcels and Population by Fire Hazard Severity Zone

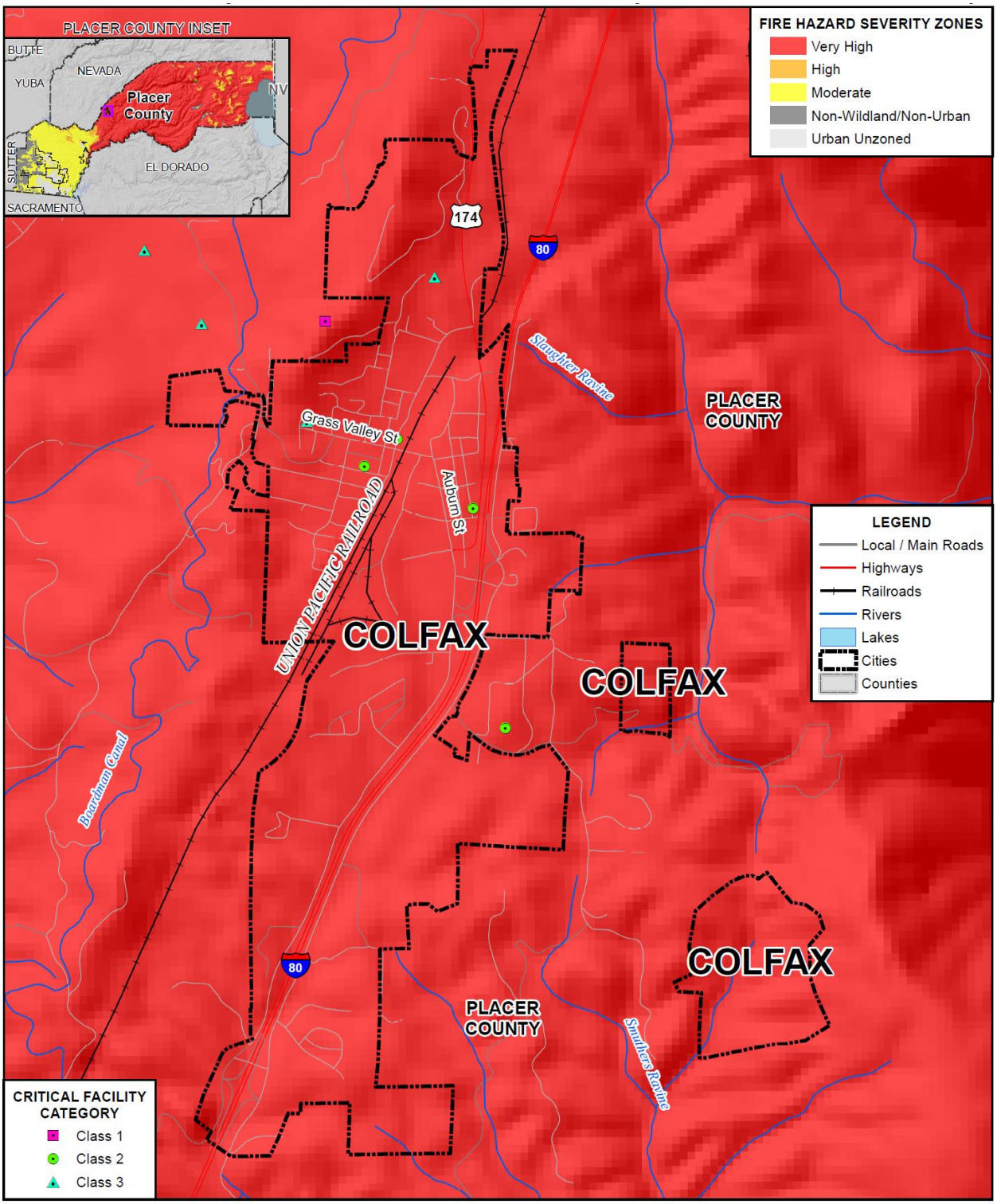
Jurisdiction	Very High		High		Moderate	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Colfax	609	1,401	0	0	0	0

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Colfax in identified FHSZs. Critical facilities in a FHSZ in the City of Colfax are shown in Figure B-11 and detailed in Table B-24. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

Figure B-11 City of Colfax – Critical Facilities in Fire Hazard Severity Zones



Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table B-24 City of Colfax – Critical Facilities by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Critical Facility Class	Critical Facility Type	Facility Count
Very High	Class 2	Fire Station	2
		Police Station	1
	Class 3	Hall	1
		Water Treatment Plant	1
Very High Total			**5**
Colfax Total			**5**

Source: CAL FIRE, Placer County

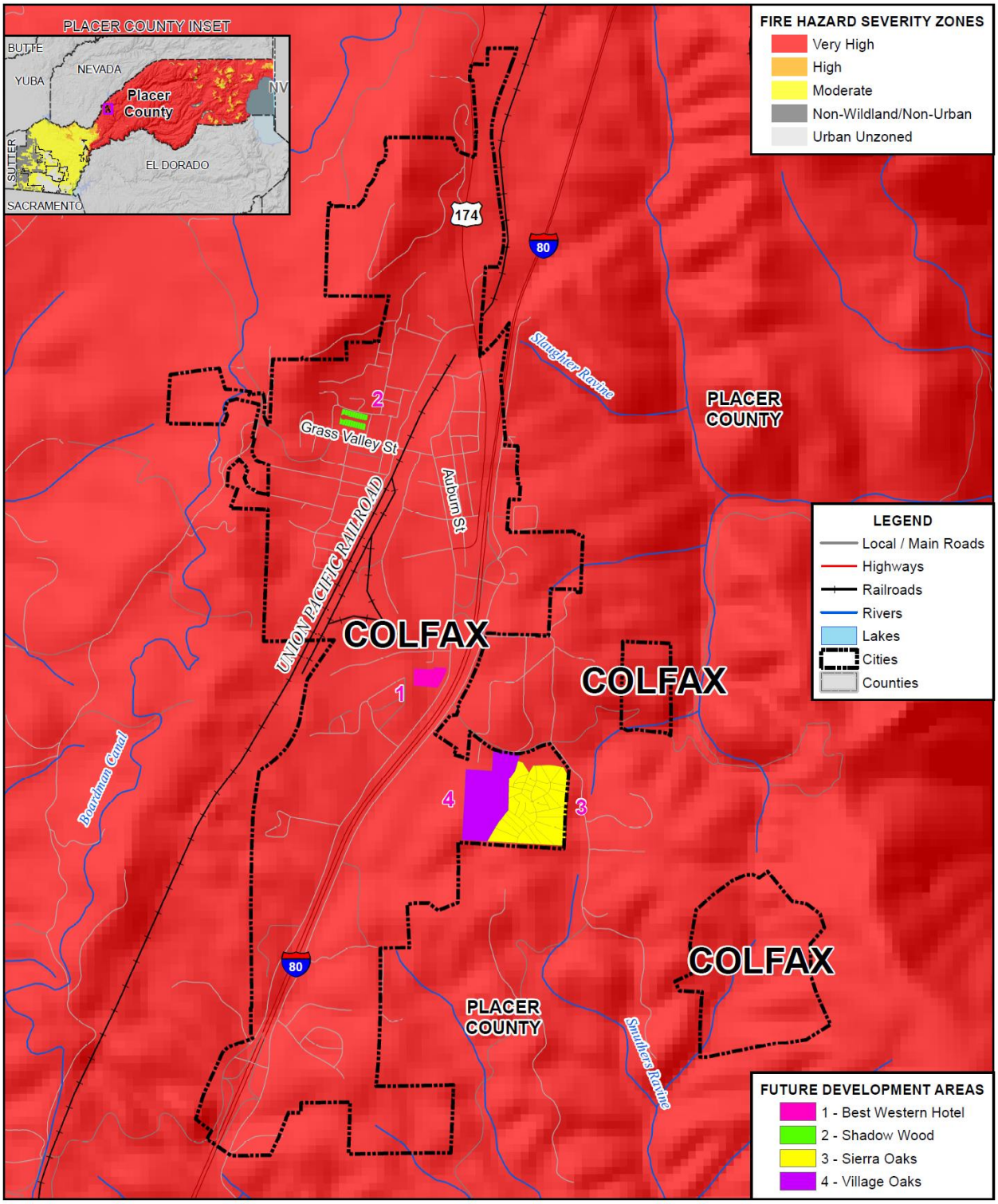
Future Development

Since the whole of the City is located in a very high fire severity zone, all future development in the City is at risk to wildfire. City building codes are in effect and should continue to be updated as appropriate to reduce this risk. The City could consider amendments to the building codes to reflect the local conditions associated with the very-high fire severity zone.

GIS Analysis

The City provided future development areas were used as the basis for the inventory of future development areas for the City. Using the GIS parcel spatial file for each of these areas, the areas and parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure B-12 shows the locations of future development areas the City is planning to develop on the FHSZs. Table B-25 shows the parcels and acreages of each future development area in the City in each FHSZ.

Figure B-12 City of Colfax – Future Development Areas and FHSZs



Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table B-25 City of Colfax – Future Development Area Parcel and Acre Counts by FHSZ

Fire Hazard Severity Zone Future Development	Total Parcel Count	Improved Parcel Count	Total Acres
Very High			
Best Western Hotel	1	0	2
Shadow Wood	20	0	1
Sierra Oaks	34	10	19
Village Oaks	1	0	13
Grand Total	**56**	**10**	**35**

Source: City of Colfax

B.6 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation education, outreach, and partnerships, and other mitigation efforts.

B.6.1. Regulatory Mitigation Capabilities

Table B-26 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Colfax.

Table B-26 City of Colfax Regulatory Mitigation Capabilities

Plans	Y/N Year	Does the plan/program address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan/General Plan	Y/ 2020	Housing Element was updated in 2021 and a comprehensive update of the General Plan was initiated in 2019 and is anticipated to be completed in 2022. The General plan addresses hazards in the safety element. Mitigation actions are included in many elements. The General Plan is used to implement mitigation actions.
Capital Improvements Plan	Y	
Economic Development Plan	Y	
Local Emergency Operations Plan	Y	
Continuity of Operations Plan		
Transportation Plan		
Stormwater Management Plan/Program	Y	Terrence Lowell and Associates
Engineering Studies for Streams	N	
Community Wildfire Protection Plan	Y	Y, it is a WUI (Wildland Urban Interface) plan, Y

Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)		
Building Code, Permitting, and Inspections	**Y/N**	**Are codes adequately enforced?**
Building Code	Y	Version/Year: 2019 CBC
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire department ISO rating:	Y	Rating: 5
Site plan review requirements	Y	Design Guidelines in Zoning Ord
Land Use Planning and Ordinances	**Y/N**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning ordinance	Y	Updated in 2012. It is effective and adequately enforced.
Subdivision ordinance	Y	
Floodplain ordinance	N	No 100- or 500-year floodplain in the City.
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Y	Hillside development guidelines. They are dated and could be improved to account for fire related concerns.
Flood insurance rate maps	N/A	
Elevation Certificates		
Acquisition of land for open space and public recreation uses	N	
Erosion or sediment control program	Y	Terrence Lowell and Associates
Other		
How can these capabilities be expanded and improved to reduce risk?		
The City's Hillside development guidelines are dated, have graphics that are difficult to read and do not acknowledge the City's fire risk. They should updated to provide better guidance for hillside development in very-high fire severity zones. The plans can be consolidated into a simple, easy to understand pamphlet for property owners, business owners and developers.		

Source: City of Colfax

The City of Colfax General Plan Program, 2020

The City of Colfax General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the City is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The current General Plan is considered outdated. It is anticipated that this process will be completed by 2016. The most substantive changes in this document will be the Land Use, Circulation and Natural Resources Elements. Minor changes will be made to bring the document into internal consistency to the Safety, Community Design, and Economic Development Elements. No changes are anticipated to the Noise Element.

The current Safety Element, for the most part, provides accurate and current information and focuses on safety issues to be considered in planning for the present and future development of the Colfax Planning Area. Identified hazards include fire, geologic/seismic, erosion, flooding, and hazardous materials. Mitigation-related goals, policies, and actions are presented below.

Goal 7.9.1:	**To protect the community of Colfax from injury, loss of life, and property damage resulting from natural catastrophes and any hazardous conditions.**
Policy 7.9.1.1:	Require a review of all potential hazards in areas to be developed.
7.9.1.A	Actions: Make information relating to potential hazards on site specific areas in the City available to all City agencies and related City leadership and planners.

Goal 7.9.2:	**To effectively minimize risks associated with seismic hazards by regulating the design and siting of new development in the City of Colfax.**
Policy 7.9.2.1	Avoid placement of critical structures, public facilities, and high-occupancy structures in areas prone to ground failure during an earthquake.
Policy 7.9.2.2	Establish acceptable seismic safety standards so that all new buildings shall be constructed to resist the stresses and ground shaking produced during earthquakes.
Policy 7.9.2.3	Require a review of all potential geological hazards, including seismic hazards, for all developments in identified hazardous areas.
7.9.2.A	Action: Record information on potential geologic and seismic hazards with parcel or subdivision maps.
7.9.2.B	Action: Review Building Code requirements to determine the adequacy of standards necessary to protect against all seismic hazards and to assure that the Code is current with the latest technological advances.
7.9.2.C	Action: Develop programs in cooperation with other public agencies to increase public awareness of seismic hazards and to assure that the Code is current with the latest technological advances.

Geological Hazards

Goal 7.9.3	**New development proposed within areas of potential geological hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or an adjoining properties.**
Policy 7.9.3.1:	Adequate mitigation shall be required on sites with landslide potential, or erodible soils to protect against injury and property damage and to assure a level of development which will not accelerate runoff or degrade water quality.
Policy 7.9.3.2	Replanting of vegetation following development shall be required on all slopes prone to erosion and/or instability. Drought resistant plant types shall be used for landscaping on post development slopes where excess water might induce land slippage or soil erosion.
Policy 7.9.3.3	Encourage clustering of development away from areas considered geologically unstable.
7.9.3.A	Actions: Adopt and enforce a comprehensive Grading and Erosion Control Ordinance, requiring control of existing erosion problems, as well as the installation of erosion, sediment, and runoff control measures in new developments.
7.9.3.B	Actions: Adopt regulations relative to zoning and subdivision ordinances which regulate land alterations, road construction or structural development on slopes of 15 percent or greater.

Wastewater Treatment

Goal 7.9.4	To insure the adequate wastewater collection, treatment and safe disposal.
Policy 7.9.41	The City shall limit development if the limits of the Wastewater Treatment Plan (WWTP) are reached.
Policy 7.9.4.2	The City shall promote efficient water use and reduced wastewater system demand by:
A.	Require water-conserving design and equipment in new construction;
B.	Encouraging retrofitting with water-conserving devices;
C.	Design wastewater systems to minimize inflow and infiltration to the extent economically feasible.
Policy 7.9.4.3	The City shall encourage pre-treatment of commercial and industrial wastes prior to their entering community collection and treatment systems.
7.9.4.4	The city shall permit on-site sewage treatment and disposal on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards.
7.9.4.A	Actions: The City shall proceed with the design, financing and construction of capital improvements of the current wastewater treatment system to meet future growth and development demands.
7.9.4.B	Actions: City staff shall monitor and report quarterly to the City Council on the current inflow levels of the WWTP.
7.9.4.C	Actions: The city shall continue to evaluate and collect development fees to cover the maintenance and improvements required in the wastewater system.

Fire Hazard Safety

Goal 7.9.5	To protect the public from wildland and urban fire hazards and reduce the risks of wildfires and structural conflagrations by mitigating or minimizing use and development in high fire hazard areas, and by maximizing fire prevention measures and citizen awareness of fire hazards.
Policy 7.9.5.1	All new development shall be constructed, at a minimum, to the fire safety standards contained in the California Fire and Building Codes.
Policy 7.9.5.2	Require all new developments, including single family dwellings on existing parcels of record, to provide adequate access for fire protection.
Policy 7.9.5.3	Amend City Ordinances to include specific road standards developed in conjunction with Colfax Fire Department.
7.9.5.A	Action: Enforce the existing City Ordinance regarding weed abatement on lots and larger properties within city-limits.
7.9.5.B	Action: Adopt an ordinance for the provision of fire-resistant materials and landscaping, and the use of early warning systems such as sprinklers with alarms for all new developments.
7.9.5.C	Action: To the maximum extent feasible conduct-periodic inspections of vacant properties to ensure that dry weeds and other combustible fuels are not permitted to accumulate.

City of Colfax Emergency Operations Plan

The City of Colfax Emergency Operations Plan (EOP) Plan addresses the planned response for the City to emergencies associated with disasters, technological incidents, or other dangerous conditions created by either man or nature. It provides an overview of operational concepts, identifies components of the City emergency management organization, and describes the overall responsibilities of local, state, and federal entities.

B.6.2. Administrative/Technical Mitigation Capabilities

Table B-27 identifies the City department(s) responsible for activities related to mitigation and loss prevention in Colfax.

Table B-27 City of Colfax's Administrative and Technical Mitigation Capabilities

Administration	Y/N	Describe capability Is coordination effective?
Planning Commission	Y	City Council sits as PC when needed
Mitigation Planning Committee	N	
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Y	Storm draining clearing, tree trimming for defensible space (fire danger)
Mutual aid agreements	Y	Cal Fire and other fire agencies
Other		
Staff	**Y/N FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?**
Chief Building Official	Y, P/T	The CBO is a part-time contract position.
Floodplain Administrator	N	
Emergency Manager	Y	City Manager serves as the City's Emergency Manager
Community Planner	Y P/T	The Planning Director is a part-time contract position.
Civil Engineer	Y P/T	The City's Engineer is a part-time contract position.
GIS Coordinator	N	
Other		
Technical		
Warning systems/services (Reverse 911, outdoor warning signals)	Y	City is part of the Everbridge program through Placer Sheriff Dept. and Placer Alert (cell phone register to receive alerts)
Hazard data and information		
Grant writing	Y	
Hazus analysis		
Other		
How can these capabilities be expanded and improved to reduce risk?		
Routine EOC exercises will help train City's in-house and contract staff prepare for emergency response.		

Source: City of Colfax

B.6.3. Fiscal Mitigation Capabilities

Table B-28 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Table B-28 City of Colfax's Fiscal Mitigation Capabilities

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Y	
Authority to levy taxes for specific purposes	Y	
Fees for water, sewer, gas, or electric services	Y	
Impact fees for new development	Y	
Storm water utility fee	Y	
Incur debt through general obligation bonds and/or special tax bonds	Y	
Incur debt through private activities	Y	
Community Development Block Grant	Y	
Other federal funding programs		
State funding programs	Y	
Other		
How can these capabilities be expanded and improved to reduce risk?		
The City will seek to use Cal OES, FEMA, CA DWR, and other funding streams.		

Source: City of Colfax

B.6.4. Mitigation Education, Outreach, and Partnerships

Table B-29 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information.

Table B-29 City of Colfax's Mitigation Education, Outreach, and Partnerships

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Y	ALTA CERT (through Alta Fire dept), Red Cross

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	N	
Natural disaster or safety related school programs	Y	CSOs thru Placer County Sheriff
StormReady certification	N	
Firewise Communities certification	N	City participates in the Placer Sierra Fire Safe Council
Public-private partnership initiatives addressing disaster-related issues	Y	Haz Mat transport training with UPRR and residents
Other		
How can these capabilities be expanded and improved to reduce risk?		
Firewise community certification could be promoted and used to leverage residents' efforts to reduce the fuel loads and the threat of wildfire.		

Source: City of Colfax

The City contracts with the Placer County Sherriff's Department to provide police services. The 24 hour per day service includes patrol, detectives, evidence, juvenile services, dispatch center, traffic enforcement and traffic accident investigation. Other specialized units that are available upon need include: S.W.A.T, Dive/Rescue Team, Explosive Ordinance Detail, K-9/Narcotic Detection, Air Operations, Bike Patrol, Mounted Patrol, Reserve Details, D.U.I., and Targeted Enforcement and Search and Rescue Operations.

The City contracts with the California Department of Forestry to provide fire safety services. The 24 hour per day service includes a paid part-time Fire Chief, fire marshal services, dispatch and staffing. The Department maintains active volunteer program with 17 members. The City maintains two volunteer staffed fire stations.

The City also utilizes the new county-wide Wide Area Rapid Notification (WARN) system. WARN is a regional system that can be used by all Placer County law agencies as well as fire departments, the Office of Education and the Office of Emergency Services. WARN utilizes a list of telephone numbers and addresses from the phone company. Officials can pinpoint a geographic area, then type in a message that a computer automated voice will read to residents. The system is used for a variety of purposes including missing persons, fire evacuations, snow days and more.

B.6.5. Other Mitigation Efforts

The City has many other completed or ongoing mitigation projects/efforts that include the following:

- The City has increased enforcement of its weed abatement ordinance since 2002.
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.
- The Wastewater Treatment Plant has been upgraded, which will lessen the potential of a contamination event. Ongoing improvements to the Colfax Water Treatment Plant will improve water quality and serve an additional 231 more housing units.

B.7 Mitigation Strategy

B.7.1. Mitigation Goals and Objectives

The City of Colfax adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

B.7.2. NFIP Mitigation Strategy

The City of Colfax does not have any FEMA floodplains and thus does not participate in the NFIP nor the CRS.

B.7.3. Mitigation Actions

The planning team for the City of Colfax identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

- Drought & Water Shortage
- Pandemic
- Severe Weather: Extreme Heat
- Tree Mortality
- Wildfire

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each priority hazard for the five year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement and would like to preserve their hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement.

Multi-Hazard Actions

Action 1. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness

Hazards Addressed: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslides, Mudslides, and Debris Flows,

Pandemic, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: The City and County play a key role in public outreach/education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural disaster event.

Project Description: A comprehensive multi-hazard outreach program will ascertain both broad and targeted educational needs throughout the community. The City will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to the community. This includes measures the public can take to be better prepared and to reduce the damages and other impacts from a hazard event. The public outreach effort will leverage and build upon existing mechanisms.

Other Alternatives: Continue public information activities currently in place.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Existing County outreach programs will be reviewed for effectiveness and leveraged and expanded upon to reach the broader region.

Responsible Office: City of Colfax in partnership with the County

Priority (H, M, L): High

Cost Estimate: Annual costs to be determined, and will depend on the scope and frequency of activities and events as well as volunteer participation

Benefits (Losses Avoided): Increase residents' knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damages, relatively low cost to implement.

Potential Funding: Local budgets, grant funds

Timeline: Ongoing/Annual public awareness campaign

Action 2. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

Hazards Addressed: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslides, Mudslides, and Debris Flows, Pandemic, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (AB 2140). Specifically, this section requires that each jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

Other Alternatives: No action

Existing Planning Mechanisms through which Action will be Implemented: Safety Element of General Plan

Responsible Office: City of Colfax Planning Department

Priority (H, M, L): High

Cost Estimate: Jurisdictional board/staff time

Potential Funding: Local budgets

Benefits (avoided Losses): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

Schedule: As soon as possible

Action 3. Continue Annual Weed Abatement Ordinance

Hazards Addressed: Wildfire, Drought and Water Shortage, Extreme Heat, High Winds

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: The City of Colfax is classified as a "Very High Fire Hazard Severity Zone" Local Responsibility Area (LRA) by CDF in compliance with the Bates Bill (California Government Code sections 51175-51188). The city is surrounded by State Responsibility Area (SRA) rated as high fire hazard. Wildfire is a perennial threat to the city.

Project Description: There are several vacant parcels, and some developed properties, which have excessive growth of grass and other potential ladder fuels each year. If left untreated these fuels increase the fire hazard within the city limits. Further, one large parcel near the Interstate 80 exit is used by CDF as a staging area during fire season and this lot needs to be available for use.

Other Alternatives: Continue to rely on property owners to act without prompting, which has not worked historically

Existing Planning Mechanism(s) through which Action Will Be Implemented:

- General Plan 2020. The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires. Flooding is not

recognized as a hazard to the City as no portions are located within the 100-year floodplain. The Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region.

- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002.
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

Responsible Office/Partners: City Manager; Placer Sierra Fire Safe Council

Cost Estimate: Inspect all parcels in the City to determine which ones need treatment—$4,000. To reduce costs, some of this could be done by the Volunteer Fire Department. Re-inspect— $2,000. To reduce costs, some of this could be done by the Volunteer Fire Department. For those parcels which do not comply, the City must perform the work at $500 to $1,000 per parcel. Technically, this cost is recovered by tax liens on the property but in reality, the City has to carry the cost for some time, and the likelihood of recovery is low.

Benefits (Losses Avoided): The direct benefit would be to the 2000 residents of Colfax City and their business community. Plus Colfax High School enrolls 1000 students plus faculty and the Colfax Elementary School enrolls 380 students plus faculty. The City is also home to the largest publisher of medical forms in Northern California. Protecting the residents, students, businesses, and workforce in this community from wildfire is the greatest benefit from this project.

Potential Funding: Grants, City General Fund

Timeline: Annually in the Spring before fire season is declared, assuming funding is available.

Project Priority: Very High

Action 4. Colfax Schools Evacuation Site Shaded Fuel Break

Hazards Addressed: Wildfire, Drought and Water Shortage, Extreme Heat, High Winds, Tree Mortality

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: The City of Colfax encompasses 1.3 square miles. Wildfire is a constant threat. The Safety Element of Colfax's General Plan notes that Colfax and the surrounding area are designated as a "very high fire hazard area", and wildland and urban-wildland interface fires do occur relatively frequent, with a significant interface fire (the "Narrow Gauge Fire") burning close to the edge of town in 2001. The 2001 Ponderosa Fire and the 2004 Stevens Fire also threatened the city.

The Colfax Elementary School and Colfax High School are located in a feasible location for an evacuation site but a Shade Fuel Break needs to be in place in the event of a wildfire coming out of the Bear River drainage to the West of their location.

Project Description: The mitigation goals of this project are to put a 200' wide Shade Fuel Break on the ridge line to the west of the Colfax High and Elementary Schools to help protect this area from a wildfire approaching from the surrounding unincorporated areas.

Wildfire is the largest hazard this community faces. If a wildfire rages through this community unchecked the ability for Colfax City and areas within its sphere of influence to rebuild and survive are slim. It is not only an issue of if but when this community and its population will be threatened by wildfire. Wildfire has knocked at the door 3 times in the past 7 years. As the brush continues to grow the likelihood of a wildfire succeeding in opening that door continues to grow. This project will at least start the process to giving this community and its population a fighting chance.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented:

- General Plan, 1998 The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires.
- The City upgraded its building code to the 1997 Universal Building Code in 2003.
- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002. •
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

Responsible Office/Partners: City of Colfax and Placer County

Project Priority: Very High

Cost Estimate: $400,000

Benefits (Losses Avoided): The following sections show the value of property and key inventories at risk within the City of Colfax. Utilizing Placer County assessor data, the following information was obtained for the City of Colfax.

Property Type	# of units	Value
Residential	701 Units	$90,073,829
Commercial	119 Units	$24,574,567
Industrial	26 Units	$16,714,795
Total	850 Units	$131,363,191

2004 Certified Roll Values Property Type Units Net Value

Potential Funding: Grants

Timeline: Complete assessment and plan, and identify sources of funding, by no later than the next update of this plan, due in 2020

Action 5. Evaluate the Need and Feasibility of Improving Fire Prevention for the Historic Business District

Hazards Addressed: Wildfire, Drought and Water Shortage, Extreme Heat, High Winds, Tree Mortality

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Much of the historic downtown of Colfax was built over a century ago. While most of the individual buildings do not qualify for classification as historic, due to past interior remodeling, etc., the aggregate of the Historic District is essential to the character and even the survival of the City. These buildings do not have interior sprinklers or even smoke alarms or emergency lighting. Some buildings share attic space, which could easily spread a fire from one business to another, as happened in historic Nevada City, CA a couple of years ago.

Project Description: This project will evaluate the historic downtown business buildings to see what fire prevention measures are advisable, what are feasible to accomplish, and identify sources of funding.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented:

- General Plan, 1998 The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires. Flooding is not recognized as a hazard to the City as no portions are located within the 100-year floodplain. The Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region.
- In December 2016, the City amended the Municipal Code via Ordinance 531 to adopt by reference the California Construction Code and all future triennial updates of the California Construction Code.
- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

Responsible Office/Partners: City Manager

Cost Estimate: TBD

Benefits (Losses Avoided): While the Assessor Roll book puts a value of $24.6 million of all 119 businesses in Colfax (which includes businesses outside of the Historic District), the buildings in the Historic Downtown are actually irreplaceable. If any of these buildings is lost to fire, the character of the Historic District would be lessened or even lost. This would negatively impact the ability of the City to survive since the Historic District is one of its major attractions for tourists and visitors and their dollars.

Potential Funding: Grants

Timeline: Complete assessment and plan, and identify sources of funding, by no later than 2022.

Project Priority: Very High

Action 6. Drought and Water Shortage Mitigation

Hazards Addressed: Climate Change, Drought, lack of potable water

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Since the year 2000 there have been several multi-year droughts across California, including in 2007 to 2009 and 2012 to 2017. As the climate warms, water supplies continue to dwindle while demand increases. the issue that has become obvious is with the lack of water, both businesses and residents have to be better prepared to live with less and better prepared on how to do more with less.

Project Description: Establish city-wide water conservation polices and best management practices that incorporate the City, residents, businesses, and those who utilize groundwater. Establish a retrofit water supply program, continue to enforce the water efficient landscape requirements and promote groundwater recharge efforts.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: City Manager and Public Works Departments establishing polices with in their department on how to conserve water use.

Responsible Agency/ Department/Partners: City of Colfax, Placer County Water District, City Administration, Public Works, and Planning Departments

Cost Estimate: Annual cost to keep current and up to date, $40,000

Benefits (Losses Avoided): Preserving water for human and agricultural use during drought conditions.

Potential Funding: Grants, partnership with water purveyor, General fund

Timeline: 1 to 2 years to get project partners in place to sustain the drought program

Project Priority (H, M, L): M